ABSTRACT OF THE

Gulstonian Lectures

ON

SOME CEREBRAL LESIONS.

Delivered at the Royal College of Physicians,

BY G. NEWTON PITT, M.A., M.D., F.R.C.P.

LECTURE III.

ON CEREBRAL EMBOLISM AND ANEURYSM.

I PROPOSE considering to-day the cases of cerebral embolism and of cerebral aneurysm, which are for the most part included among them, that have died at Guy's Hospital between the years 1869 and 1888, a period of twenty years. In seventy-nine—that is, in 0·9 per cent., or nearly 1 per cent. of the inspections—cerebral embolism had occurred. In some of the patients two or more cerebral vessels contained clots; there were therefore ninety-five blocked vessels found in the whole series of cases. Forty-four of the patients were males and thirty-five females; there was nothing in the histories of the cases to indicate why men were more often affected than women. The youngest patient was thirteen and the oldest seventy-three; the remainder of the cases occurred between the ages of thirteen and sixty-six, the distribution being fairly uniform for the decennial periods from ten to sixty (the numbers being 18, 15, 15, 10, 15). Patients at both extremes of life seem to possess an immunity from this affection. In only six cases was the source of the emboli not discovered. In four of them the vessel had been blocked for a long time, and it is quite probable that in these, cardiac vegetations or thrombi may have given rise to emboli, and may yet have disappeared and left no trace at the post-mortem. In most of the cases there was no difficulty in tracing the source of the emboli; in sixty-eight it was found to be in the heart. The mitral valve was the most common seat, being affected in forty-six cases, in seven of which the aortic valve was also diseased. The vegetations were limited to the aortic orifice in thirteen. In most (forty-six) of these sixty-eight cases there was chronic disease of the valves, on which had been grafted a fungating endocarditis; the vegetations were generally friable, and in many ulceration of the endocardium and valves was also present. In eighteen of the cases ulceration had led to rupture of the chordæ tendineæ. The mitral orifice was markedly stenosed in twenty-six, and was generally associated with recent friable (six) or fungating granulations; in five the valve was free from vegetations, and in four of these the embolus had come from ante-mortem clotting in the left auricle, while in one no clot or granulating surface was found. The embolus originated in five from an atheromatous aorta, and in two from clotting in the left ventricle. The heart disease was usually due to rheumatism originally, but the cause of the acute fungating disease was, as is generally the case, obscure. Gonorrhœa was the starting point of the whole disease in two cases.

Of the four cases in which the mischief started from clot in the left auricle there was mitral stenosis in two of them, fibroid disease of the heart in one, and bronchitis and emphysema, with an incompetent mitral valve, in the last. Twice the clot was caught in the carotid, once in the basilar, and in the last case in the middle cerebral artery. The two cases in which there was thrombosis in the left ventricle were due to chronic Bright's disease and bronchitis respectively, and the hearts were hypertrophied and dilated; the patients were both about fifty. The aorta, the valves, and the cavities on the left side of the heart are all well-recognised sources of emboli, when they present an atheromatous surface, recent granulations, fungating endocarditis, or ante-mortem thrombosis.

There remain for consideration nine cases, to be otherwise explained. In two of these, in which the hemiplegia had lasted for two years, the heart was found to be normal at the inspection. In a third case the patient had old mitral stenosis, and during an attack of acute rheumatism ten weeks previous to her death she became hemiplegic from middle cerebral embolism. At the inspection the heart was free from any vegetations or ante-mortem thrombosis. The explanation of these three cases is doubtless that the vegetations or clots in the heart which had given rise to the emboli had become absorbed in the interval. Several similar instances are on record. In two cases, in which thrombosis had occurred in the right ventricle, there were clots in the pulmonary arteries, in one, if not in both, of which they were embolic. There remain two other cases, in which not even this explanation can be offered. One was a case of chronic bronchitis and emphysema, with a large, dilated heart, and an embolus in the left Sylvian artery; and the other a woman of fifty-six with chronic bronchitis, who developed finally right hemiplegia and aphasia, and in whom recent emboli were found in the kidneys, with patches of softening in the brain. The heart was healthy, and in neither was any source for the emboli detected.

In 75 per cent. of the cases the emboli were found in the middle cerebral vessels. The vessels which were embolised were:—

	Right.	Left.	Both.
Middle cerebral	32	38	9
Internal carotid	7	4	1
Posterior cerebral	3	2	1
Anterior cerebral	3	0	0
Totals	45	44	11

Basilar 5

On the whole, the two sides were affected with equal frequency. The cases in which the vessels on both sides were blocked are included also among those on each side. The character of the embolus varied. It was white, decoloured, or yellow in thirty-two, adherent in eighteen, non-adherent in six, firm in four, calcareous in two, and softening in three. In the two cases in which the mass was calcareous, the sources were a calcareous mitral and an atheromatous aorta. In twenty cases the emboli could not be found.

Embolism in the middle cerebral arteries was found in seventy-two patients. In fifty-one cases the emboli were found, and in twenty-one they were not found. Two-thirds of the cases were due to fungating endocarditis, and hence many of the patients were so ill that the symptoms of the embolism were often masked. In fourteen of the patients there were no symptoms of embolism during life, and its presence was only discovered in the post-mortem room. In many others the symptoms were obscure and varied much, as the following list which gives their frequency will show. Hemiplegia, 32; aphasia, which was found only with left-sided lesions, 17; coma, 8; convulsions, 7; rigidity of limbs, 4; stupor, 2; hemianæsthesia, 2; numbness on one side, 3; onset of hemiplegia without unconsciousness, 3; headache, 2; pyrexia, 2; drowsiness, paralysis of both arms and legs, delirium and erratic movements of the arms, each once. In fourteen, or a fifth of the cases, there were no cerebral symptoms to indicate the onset of the plugging. Death was frequently due to the associated heart condition or to some other complication rather than to the embolism directly. Thus, twenty-five patients died from cardiac failure and the sapræmic condition induced by the fungating endocarditis, twenty-five from the cerebral lesion (including twelve from rupture of a cerebral aneurysm and seven from coma due to bilateral embolism), two died from gangrene of the leg due to embolic occlusion of an artery, two died with general pyæmia; and in the remaining cases the causes were pulmonary (four), chronic Bright's disease (two), tubercle, cancer, drowning, and suppurative mediastinitis (one each). Only 40 per cent. of the patients, therefore, died from the cerebral lesion. The duration of life after the onset of the symptoms is also very variable, being in twelve cases less than twenty-four hours, in seventeen less than a week. Twenty-one of the patients survived from one to three months, one lived five months, while two survived one year, and two lived two years. The spot at which the clot became arrested varied. In sixteen it remained in the trunk of the middle cerebral vessel, in three at its origin, in eighteen at its first bifurcation, in two at its second division, and in twelve in one of the main branches. Only twice out of the whole series was optic neuritis noticed. It happened (in one-seventh of the cases) that both middle cerebral arteries were blocked, and sometimes, curiously enough, the clots lodged at corresponding spots on the two sides. There are nine cases in this series. All the patients

died from the cerebral condition, six being comatose, and the remaining one from rupture of a cerebral aneurysm. (Two other cases died before a report was made.) After the first infarction, one patient survived ten weeks; two, five weeks; two, three weeks; and one, two weeks. They survived from one to three days after the second vessel was blocked, except in one case in which the patient lived twenty days. The five cases in which the posterior cerebral artery was found to contain an embolus do not require much notice; in two there were no cerebral symptoms; in two others the lesions were multiple, and in the remaining one the patient developed right hemiplegia the day before his death, although at the inspection the only embolus which was found was in the posterior vessel. The three cases of embolism of the anterior vessel were complicated and presented no special symptoms. The four cases of embolism of the basilar artery presented no special features but unconsciousness, except in the following case.

A girl, aged twenty-four, with severe heart disease, was found unconscious, with paresis of the right limbs and the left side of the face. On the right side the third nerve was paralysed, and she was unable to look to the left or to raise the left eye. The right optic disc was choked. She became listless, partially anæsthetic, unintelligible, and comatose, dying a month later. The basilar artery was found to be plugged at its extremity with a decolourised embolus.

On six occasions an embolus was found in the right, and on three in the left internal carotid artery, besides one in which both the vessels were found to be closed. In two there were no definite symptoms, in five anæsthesia, in six coma, in eight hemiplegia, in four drowsiness, in three aphasia, in two convulsions, in two headache, and in one numbness, and in another no unconsciousness. It was also specially noted in four that there was a well-marked blush over the face, which persisted for some days, and in some recurred. In one there was ecchymosis and gangrene of the ears. In two cases there was inability to look to one side. There was softening in all the cases except one. Four patients died within a week, two survived only a month, and three from six weeks to four months.

Cerebral embolism is in the great majority of cases due to fungating endocarditis, and may be survived for many weeks. The patients are often seriously ill with their heart disease, and often the embolism gives rise to no symptoms at all. They die from their heart condition as frequently as they do from their cerebral lesion, the great majority of these latter cases being due to coma from multiple emboli or from ruptured aneurysm secondary to them. The symptoms are not definitely associated with the amount of softening visible, nor is this latter solely determined by the situation of the embolus. When the internal carotid is occluded there is almost invariably hemiplegia, and in some of the cases there is a well-marked recurrent blush on the face for a few days. Embolism gives rise to ecchymosis and congestion at first, passing on to red and yellow softening, but in those cases which have lasted some weeks there is white softening. Aneurysm and hæmorrhage are not infrequent.

An analysis of twenty-three cases of cerebral aneurysm shows that it is a very rare lesion, having been found only nineteen times out of nearly 9000 inspections—that is, in less than ¼ per cent. There were besides four cases in which rounded masses of clot were found in the cerebral tissue, which were thought to be aneurysmal, but the vessels with which they were connected were not definitely determined. They were all associated with fungating endocarditis, and occurred in young people, as is shown further on; the assumption that they were aneurysmal is not unreasonable. There are therefore twenty-three cases to be discussed. Of these, fifteen were males and eight females—that is, the lesion is twice as frequent with men as with women, a greater proportion than was found to exist in cases of embolism. The distribution as to age is as follows:—Nine years of age and under, 1; ten to nineteen, 8; twenty to twenty-nine, 4; thirty to thirty-nine, 3; forty to forty-nine, 2; fifty to fifty-nine, 2; sixty to sixty-nine, 1. The most interesting conclusion as to the age distribution is that nearly half (two-fifths) of the patients were between the ages of ten and twenty, and that of those cases in which the cause was embolism exactly half were between these ages. In one case there were two aneurysms, one on each middle cerebral artery; in another there was an aneurysm on one side and hæmorrhage on the other. In sixteen out of twenty-one cases there was fungating endocarditis—that is, in 75 per cent. In three there were granular kidneys and atheromatous vessels, and two of these cases were fusiform aneurysms of the internal carotid artery in the cavernous sinus. Putting these two on one side, there remain only three out of the whole series which are not associated with fungating endocarditis; one of these was the case which was thought to be tubercular. The exact mechanism by which the aneurysms are produced is still under dispute. In the great majority of the cases the embolic plug is not to be found, and yet there can be no doubt, from a consideration of the whole series, that the formation of an aneurysmal dilatation is almost, if not always, preceded by an embolic plugging when the patient is young. Not only must there be an embolus, but probably it must be septic. This is shown by the association of a fungating endocarditis in all the cases, and in none of them was the source of the embolus an ante-mortem clot, an atheromatous aorta, or any other non-septic source. In two cases the aneurysm formed at the seat of the clot; in two others the dilatation took place—in the one on the proximal side, and in the other on the distal side of the blockage. It has been suggested that the vessel gives way because the embolus is tough and calcareous, yet in the two instances in which they were calcareous this had not occurred, while in some the clot was markedly soft.

The following conclusions may be drawn from these cases of aneurysm. The size was in six described as that of a pea, four were oval sacs from half an inch to three-quarters of an inch in diameter, one was the size of a walnut, and one was a bilobed sac the size of two nuts. In twelve cases death occurred from rupture of the sac. In six of the patients death had occurred from other causes, and the aneurysmal sacs were found unruptured. Death in these had taken place from heart disease (two), from multiple patches of softening in the brain (two), from amputation, and from suppurative mediastinitis. The hæmorrhage had these features: the aneurysm was situated on the surface in all but three, and two of these extended to the surface. The clot had extended into the cerebral tissue, and had ploughed it up in several, in five rupturing into the lateral ventricle, in eight on to the surface; in several of the cases it had extended in both directions. In consequence of the blood so readily reaching the surface death frequently took place rapidly. One, three, seven, and nine hours were the most rapid cases. In many of the cases there were no symptoms previously to the rupture, except a headache, which was a feature in some of them. The onset of the embolism was marked by hemiplegia in six, and in several associated with a dull, stupid mental condition, in others by a period of unconsciousness, and in some by fits. The cases of aneurysm of the anterior and posterior cerebral arteries presented no characteristic symptoms to indicate the vessels affected.

The main conclusions that may be drawn are:—It is most exceptional to find a cerebral aneurysm which is not associated with fungating endocarditis. The lodging of a septic embolus is the starting point of the changes which take place in the vessel. The clot inflames, and in most cases disappears, the vessel dilating from the inflammatory changes in its coats. An aneurysm may form and rupture in three weeks. The onset of the embolism may not be marked by any symptoms, and the rupture of the aneurysm may be the first indication that there is danger. The aneurysms are usually on the surface of the brain, and when they rupture they are more rapidly fatal than other forms of cerebral hæmorrhage. As the aneurysm increases in size, it tends to spread inwards, ploughing up the cerebral tissue, and may rupture into the lateral ventricle, although it has originated on or near the surface. Cases of cerebral hæmorrhage in young people will generally be found to have originated in aneurysm.

LEEDS GENERAL INFIRMARY.—The annual report for 1889 of the infirmary and the Ida Semi-Convalescent Hospital exhibits the increased and satisfactory work done in the respective departments during the year. The horse ambulance continued to be much appreciated by the public. It was called into service on 332 occasions. The financial statement shows a credit balance of upwards of £2500. The plans for the extension of the hospital were on the point of being fully matured, and contracts for the works will be obtained. Of the £30 000 promised to the extension fund in 1888, about £25,000 had been received.

Clinical Lecture
ON
OPTIC NEURITIS.

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MR. CHAIRMAN AND GENTLEMEN,—In my last lecture I described to you in detail the features of the normal fundus, together with the physiological variations in its structure which may occur without disturbance of vision. I spoke of anatomy of the disc, of physiological and pathological cupping, opaque nerve fibres, posterior staphyloma, &c. I explained to you how to obtain roughly an idea of the refraction of the eye, and gave an exposition of the optical conditions which form the examination of the fundus in the indirect and direct methods of observation. To-night I shall speak of some of the morbid conditions of the fundus—viz., hyperæmia of the disc, neuritis or papillitis, and atrophy. I explained to you previously that the colouration of the disc is liable to very great variations consistent with perfect health, and is much influenced by a variety of circumstances, such as the general complexion, age, and the condition of the capillary circulation in the head and face. So that unless we have some previous knowledge of our patient and have made ourselves previously acquainted with the condition of his fundus, we may not, offhand, be able to express a decided opinion upon the presence or not of a pathological condition of hyperæmia. Persons who have much injection of the facial capillaries and fullness of the vessels of the head usually have hyperæmic discs, and thus it is a frequent condition in heart disease, chronic bronchitis, Graves' disease, alcoholism, &c. The recognition of this condition has, under these circumstances, no special bearings in an ophthalmological point of view. In these cases, however much the disc may be reddened, and however full of blood the vessels may be, the margin of the disc is always recognisable in the direct image and, indeed, sometimes stands out more clearly, especially in cases where there is a well-marked sclerotic ring. The conditions of illumination exert more effect than you would expect upon the appearance of vascularity in the disc, a very strong light destroying the natural tones and making all the parts look less vascular. For this reason we should always use as weak a light as is consistent with a clear view of the parts, and we should never estimate the condition of vascularity, except in the erect image. You will also bear in mind that there is no direct connexion between the vascularity of the disc and that of the fundus generally, their blood-supplies being quite distinct.

No one who is unaccustomed to examine a large number of persons ophthalmoscopically can form any idea of the influence of errors of refraction, especially hypermetropia and hypermetropic astigmatism, on the vascular conditions of the disc. It may and almost always does produce an increased amount of vascularity, but it may even go further than this, and produce a distinct though slight condition of neuritis, or a state indistinguishable from it; so much so that if care be not exercised and repeated examinations made, we might come to false conclusions in a case where a real neuritis from other causes might legitimately be expected. No doubt it is under these circumstances that we have reports of neuritis existing for long periods without any disturbance of the acuity of vision; for although such a combination of circumstances does unquestionably sometimes occur, I do not think it is quite so common as some physicians have represented it to be. If you ask me how to differentiate this comparatively unimportant change from the more grave one which indicates the commencement of a real neuritis, I can only say that habit enables us to do so; still the acquisition of the habit must have some objective basis, and this I think is to be found in the fact that the disc is more vascular than is usual in the commencement of neuritis. There is no real swelling of the disc, but only a slight mistiness, such as is seen when viewing an object slightly out of focus. We may frequently, too, derive some valuable information from a comparative examination of the two eyes. In real neuritis there is usually some slight difference between the two, which does not exist under other circumstances. Well then, gentlemen, you must bear in mind that in cases of hypermetropia, especially when asthenopic symptoms have existed for some time, you must be careful in forming a diagnosis of incipient neuritis. With all beginners in ophthalmoscopy, a very favourite diagnosis is "a hyperæmic disc" or "a congested disc." Nine times out of ten, if I send a new student to form a diagnosis, he returns with this answer. Now I think I may say, with certain reservations, that a congested or hyperæmic disc is not a condition of great pathological significance; nor as a rule is it an initial condition of neuritis—at all events of that form of it which we most frequently meet with in intra-cranial disease. Usually the first change to be observed, or at all events the first we can detect with the ophthalmoscope, is slight œdema, usually occupying the central spot or point of emergence of the central vessels, and the effect of it is to mask the distinctness of the lamina cribrosa. This effusion by mechanical pressure interferes with the return of blood through the central veins, consequently venous turgescence is developed early. As the œdema increases it spreads over the disc, gradually passing over its margin and obscuring the sclerotic ring. This process of obscuration as a rule does not always proceed equally in all directions. It is generally most visible on the nasal side, where the nerve fibres are more numerous and the retina is thicker, but exceptionally it is more marked in other directions. Its effect is to interfere considerably with the clear outline of the papilla, and indeed when exaggerated to render its definition impossible. As matters progress, the disc absolutely swells and becomes prominent like a nipple or papilla; hence the term papillitis, to which some authorities have raised great objections, I think very unnecessarily. I show here on the blackboard drawings I have made, side by side, of a healthy disc and an inflamed one. This will give you a better idea of the change than words. The swelling, as you see, considerably influences the length of the antero-posterior axis of the eye. It may, indeed, give rise to a considerable degree of hypermetropia, and in an emmetropic one may even convert a myopic into a hypermetropic one, and will necessarily render one that is already hypermetropic much more so.

We can in a rough way measure the amount of swelling by the strength of the glass which it is necessary to use to get a clear and well-defined image of the summit of the disc in this condition of artificial hypermetropia. Roughly speaking, we may estimate it at one millimetre for every three dioptres. Thus in an eye, which we knew previously to be emmetropic at the disc, if to get a clear definition of this part a + lens of 3 D is required, we know there will be a prominence or swelling of one millimetre; if + 6 D, there will be a swelling of two millimetres and so on in proportion, and I can tell you that the amount of swelling and consequent hypermetropia are often very astonishing. If we have no previous knowledge of the refraction of the eye under examination, we must institute a comparison between the refraction at the disc and some adjoining portion of the retina, and base our calculations upon the difference between the two, for the swelling rarely extends beyond the confines of the papilla. As the inflammatory conditions develop, the interference with the vessels becomes gradually greater, the veins become sometimes enormously distended and tortuous, and the relative proportions between them, which should be that of two-thirds or three-fourths larger, considerably disturbed. In some cases this may be due to an absolute decrease in the size of the arteries as well as to an enlargement of the veins, for it is clear that whatever mechanically interferes with the exit of venous blood through the disc, must in a measure impede the ingress of arterial supplies. Hence at an early stage of neuritis the arteries may be absolutely diminished in size, and it is characteristic of some forms of neuritis and neuro-retinitis that they remain so, but in most forms after a time the mechanical compression becomes lessened, and the arteries as well as the veins become dilated.

I have now taken you through the stages of a slight and well-marked neuritis, but if the conditions which determine the initial stages become aggravated, the disc may pass into a more pronounced or aggravated form of disturbance, and present the appearance of what I understand to be the "Staungs papilla" of the German pathologists, or what was originally very well described by

Clifford Allbutt as the "choked disc." In some aggravated cases I cannot help thinking that we require an even stronger term, and I think this might be found in "strangulation papilla." In speaking of the various theories enunciated to explain the development of neuritis, I shall again refer to this condition. Here I merely wish to describe its objective symptoms, which I hope to do with the aid of this lantern slide. This drawing was made by me from the disc of a man who presented all the symptoms of a rapidly growing intracranial tumour. It will be foreign to our purpose to enter into those symptoms now, but I may say that the patient ultimately died, and the diagnosis was verified by post-mortem examination. The drawing was made some months before the patient's decease, and when the acute symptoms were at their height. As you see, the disc is enormously swollen and reddened; the vein much distended and tortuous; the point of emergence from the disc is hidden in the swelling, which extends in this case considerably beyond the disc. Flame-shaped hæmorrhages are numerous, running in most instances parallel with the border of the vessels. The colour of the arteries and the veins is indistinguishable, but the difference in their size is marked, though at a subsequent period it was much less so. You will observe that the margin of the disc is completely lost to view, but the swelling at the point where it should be visible presents a certain amount of striation; the striæ radiate from the centre, and are imparted to the picture by the expansion of the nerve fibres. The same striation is visible in the hæmorrhages, especially at their margins. The papilla in these cases has generally a much more ruddy hue than in the milder cases of neuritis, due no doubt in a great measure to the distension of the minute capillaries, and partly perhaps to diapedesis of the blood-corpuscles.

Now, gentlemen, having placed these sketches of neuritis in various forms and degrees before you, let us pass to the consideration of some of the more common causes of this condition, dealing chiefly with the medical aspect of the question. Neuritis may result from any coarse disease within the cranial cavity, but it is much more frequent in certain conditions than in others. I will endeavour to place the various maladies with which it is most commonly connected in order of frequency, and then say a few words upon the special features it may be expected to present in some of these, for it is obvious that in the space of a single lecture it will be quite impossible to deal with them all.

First of all, I think, will come cerebral tumours of whatever kind or nature; second, meningitis in all its various forms; third, injuries and accidents; fourth, cerebritis, abscess, and softening; fifth, hydrocephalus; sixth, certain constitutional conditions, renal disease, glycosuria, syphilis, anæmia, menstrual disorders, and lead poisoning.

First, then, a few words upon optic neuritis in connexion with cerebral tumour. It probably occurs with greater relative frequency with this than with any other form of intracranial disease, being present in at least 75 per cent. of cases. We may say that, generally speaking, its intensity is in a direct ratio with the intensity of the general symptoms. Thus, we may meet with some of the mildest, and, on the other hand, some of the most marked and decided cases under these conditions. It is almost invariably bilateral, though some few cases have been recorded where neuritis was present in one eye alone, and that opposite to the seat of the lesion found on post-mortem examination of the brain. Although almost invariably bilateral, it not unfrequently commences in one eye, and at times throughout the disease it is more marked in one than in the other. Its presence is of considerable diagnostic value in cases where the other symptoms of cerebral tumour are obscure, but it has no localising value. It may be developed only in a slight degree when the tumour lies in tolerably close proximity to the nerve; on the other hand, it may exist in its most exaggerated form, though the tumour may be at the greatest possible distance, as in the cerebellum. I think I have noticed that it is usually most marked in those cases where vomiting is a prominent symptom, and certainly this complication tends to exaggerate it and render it more marked in whatever disease it makes its appearance. To this point I shall, however, refer again when speaking of the various theories which have been propounded to explain the development of neuritis.

One peculiarity which strikes us forcibly is the little influence that this condition may exert upon the visual functions. Neuritis may exist in its most marked and exaggerated form without any complaint being made of sight, and it is probably for this reason that it escapes notice in many cases till a late period. This fact points to the necessity of the ophthalmoscope being used as a matter of routine in all cases of disease threatening the cerebro-spinal centres, though its services should not be neglected in other diseases generally.

In meningitis, neuritis is a very uncertain symptom according to some, a very frequent one according to others; but under any circumstances it may be said to have this peculiarity: it usually commences with more evident inflammatory appearances than that form which accompanies tumour. If the case is watched *ab initio*, the tint of the disc is generally seen to present, for a period, signs of active congestion. The redness may become so marked as to render the nerve entrance indistinguishable by any other signs than the convergence of the central vessels, and that, too, without there being much œdema or other evidence of inflammatory effusion into the disc. Some little time ago I was consulted by a gentleman concerning his son, a little boy of six years of age, who suffered from strabismus. I examined the boy, who at the time was not very well, found him suffering from hypermetropia absolute of 4 D, with good visual acuity in both eyes, and normal discs. A fortnight later, I was asked to see the boy in consultation with another medical practitioner. He could not be induced to wear the spectacles I had ordered him; complained of pain in his head, was fretful, and occasionally vomited. Slept badly, yet was always wanting to lie down, and was very unruly and impetuous in his temper. I now examined him again ophthalmoscopically, and found very active hyperæmia, preventing, in the indirect image, the distinction of the disc being made from the rest of the fundus. I knew this condition had not previously been present. Had it been otherwise I might have attributed it to the hypermetropia from which he suffered. I therefore gave it as my opinion that it was the commencement of optic neuritis, and indicated grave intracranial mischief, probably meningitis. In spite of all treatment the child grew worse; in a few days, well-marked neuritis was evident, and at the end of three weeks the little fellow succumbed with all the symptoms of tubercular meningitis. In cases, then, of suspected meningitis, an ophthalmoscopic examination should never be omitted; for although the negative evidence it may afford is of comparatively little value, the positive cannot be overestimated, both as a help to treatment and prognosis.

Injuries to the head are not a very common cause of neuritis unless they are severe and attended with fracture in the neighbourhood of the optic foramen. When they set up basal meningitis it is not uncommon, but it is rare in cerebritis. When it appears after injuries it usually assumes the congestive or vascular form I have spoken of as being connected with inflammation of the meninges. Rarely it assumes the ischæmic form, and this usually when the injury has set up some periostitis in the neighbourhood of the optic foramen, under which circumstances the neuritis may be monocular. I lately had a very good illustration of this in the wards of the hospital. A lad suffered from all the symptoms of fracture of the skull from a squeeze between two tubs in a pit. Monocular optic neuritis was well marked, together with anæsthesia of the conjunctiva, from injury of the fifth nerve on the same side. The neuritis was very intense, and of the ischæmic character, but owing to the supervention of corneal changes, due to the fifth nerve injury, could not be watched for a sufficiently long period to ascertain the result. Hydrocephalus is not unfrequently attended with neuritis. This is especially the case in young infants. I think it is mainly due to dropsy of the nerve sheaths, and may exist for some time before the more obvious signs of hydrocephalus exhibit themselves. It not unfrequently escapes observation, owing to the difficulty of examining young children and the absence of directing symptoms. Atrophy has as a rule established itself before attention is drawn to the lowering of the visual functions.

(To be concluded.)

MUNICIPAL ELECTION AT BRIGHTON.—At the ordinary meeting of the Council of the County Borough of Brighton, on the 17th inst., Councillor Dr. Joseph Ewart, J.P., was elected an alderman of the borough. Dr. Ewart is chairman of the Lighting Committee now engaged in introducing the electric light into Brighton under the orders and authority of the Corporation.

SOME UNUSUAL FORMS OF HYDROCELE.

BY A. PEARCE GOULD, M.S., F.R.C.S.,
SENIOR ASSISTANT SURGEON TO THE MIDDLESEX HOSPITAL.

HAVING had during the past few months several cases of hydrocele which presented peculiar features, I hope that a brief record of them may not be without interest to the readers of THE LANCET. The clinical features of the common forms of hydrocele are so well-known that I will not allude to them, but will merely indicate the special points in which these unusual cases differ from the commoner varieties of this disease.

CASE 1. *Lipo-hydrocele, or so-called galactocele; hydrocele graisseuse.*—Mr. T. W——, aged sixty-one, consulted me on Oct. 20th, 1888, for a "chronic enlargement of the left testicle." He stated that twenty-five years ago he struck the left testicle and had a severe attack of inflammation, which left the epididymis enlarged. Four years ago he went to Australia for "chronic lung mischief," and after two years returned quite free from cough. Soon after his return he took cold and suffered from enteritis, and it was after this that he first of all noticed the swelling in the scrotum. When I saw it the swelling had existed for eighteen months, and was steadily increasing; it was fully as large as a duck's egg, ovoid, smooth, uniform in consistence, obscuring the testicle, neither tender nor painful, fluctuating all over except behind, translucent except over a small part quite at the back. The cord was a little fuller than on the right side, but was quite distinct above the swelling. The patient complained of a dragging pain in the inguinal canal, with occasional shooting pains through to the spine and the left hip. I diagnosed a chronic vaginal hydrocele, and proceeded to tap it in the usual way. The fluid that first flowed was pale straw-coloured and nearly clear, but at the end it came quite thick, almost like pea-soup. The total amount removed was three ounces. The testicle was slightly enlarged, somewhat uneven, and the distinction between the epididymis and the body of the testicle was obliterated; the testicular sense was normal. On setting aside the fluid it separated into two parts. The greater part became quite clear, of a greenish-yellow colour, with fine filmy flakes in it. Surmounting this was an opaque yellow layer half an inch thick. A drop of this "cream" was found by microscopical examination to consist of fine fat granules and minute oil drops; there was no cholesterine in it, nor were any spermatozoa found in the fluid. The fluid reaccumulated; and on March 29th, 1889, I tapped him again and drew off perfectly clear straw-coloured fluid. There are a few recorded cases of a fatty fluid removed from the tunica vaginalis. Vidal de Cassis records a case of double hydrocele, and each tumour when tapped yielded a fluid like milk in appearance, alkaline, odourless, and containing abundant fat, also sugar and caseine; no phosphates. In 1864 Fergusson showed at the Pathological Society five ounces of fluid like milk which he had removed from the tunica vaginalis of a man forty-two years of age. The patient was tapped three times, and on each occasion the fluid presented the same appearances. The fluid was analysed by Dr. G. Harley and Mr. F. Mason, who reported that it was hydrocele fluid with an addition of free fat; the reaction was alkaline; specific gravity 1019. In May, 1884, Mr. Shattock showed at the Pathological Society some fluid like "rich milk," which had been withdrawn by Sir H. Thompson from what appeared to be an ordinary vaginal hydrocele of long duration in a man of considerable age. The hydrocele rapidly refilled, and was again tapped, and "a cream-like fluid" withdrawn. Mr. Shattock regarded the fluid as "chylous lymph." Mr. Curling suggested that the peculiar fluid resulted "from obstruction to the lymphatics or from an escape of their contents." MM. Monod and Terrillon in their recently published work attribute the condition to rupture of a lymphatic vessel, or to a lymphatic secretion. Against these views are the facts that this form of hydrocele is not met with in elephantiasis scroti where the lymphatics are known to be obstructed, and that conversely milk hydrocele has not been associated with lymphatic œdema of the scrotum or any change in the coverings of the tunica vaginalis suggestive of lymphatic obstruction. And still further, the fluid has not quite the characters of lymph or chyle; it does not coagulate spontaneously, nor does it contain lymph corpuscles. Although this view has the support of such eminent authorities, I cannot help hesitating to accept it, and preferring to it that originally advanced by Klebs, that these cases are to be explained by fatty degeneration of the endothelium of the tunica vaginalis. Traces of fat are to be detected in ordinary hydrocele fluid, and if such fluid is set aside to stand epithelial cells undergoing fatty degeneration can be found in the slight deposit that forms. There seems, then, fair ground to assume that the small quantity of fat in ordinary hydrocele fluid comes from the endothelial cells, and if that is so, it is not unreasonable to attribute the presence of an excess of fat to an exaggeration of the same endothelial degeneration. The case I have just recorded is of value, as being an intermediate condition between common hydrocele and the cases where the fluid has been like milk, and it seems to show that the affection is one of an addition of fat to hydrocele fluid, and not something *per se*. Light is also thrown upon these cases by what is well known as regards cholesterine in hydroceles. Normally a small quantity of cholesterine is present; not uncommonly, and particularly in old hydroceles, the cholesterine is much more abundant and apparent to the naked eye; very rarely the contents of the tunica vaginalis are almost pure cholesterine. It is customary to regard these latter cases as mere exaggerations of the normal. It is stated on the highest authority that nothing is certainly known of the mode of origin of cholesterine; but it is allied both chemically and pathologically to fat. Chemists call it an "unsaponifiable fat"; pathologists find it in the seat of fatty degeneration as in patches of atheroma, largely also in degenerations of nerve tissue in which fat abounds. I should therefore regard all these cases as due to degenerative changes in the endothelium, in the one group resulting in the formation of cholesterine, in the other group resulting in fat. And that in both groups the degeneration may be of varying intensity with corresponding variations in the character of the fluid. What condition it is which governs this degeneration, or why it often results in the formation of cholesterine, and very rarely in the formation of fat, are at present unsolved problems.

CASE 2. *Case of vaginal hydrocele simulating encysted hydrocele of the testicle.*—An Irishman, seventy-three years of age, came to the out-patient department of Middlesex Hospital on Dec. 6th, 1889, complaining of a large swelling in the left side of his scrotum. This was found to be irregularly cylindrical in shape, about seven inches long, and nearly as large in circumference as a closed fist. On closer examination the upper part was found to reach up into the inguinal canal, to be less tense than the lower part, tympanitic on percussion, and easily reducible into the abdomen. After reducing this hernia the lower part of the scrotal swelling was found to be a tense globular tumour, entirely scrotal, fluctuating and translucent. At its lower part, and inseparably attached to it, was the testicle, the greater part of its outline being plainly felt, and only its upper end being obscured by the lower part of the tumour. It was difficult to obtain from the patient any definite history, but it seemed clear that the scrotal swelling had existed for a long time, and that the hernia was of more recent origin. From the fact that the fluid did not surround the testicle, I inferred that it was not in the tunica vaginalis, but in a distinct cyst, and its strikingly globular form confirmed me in this opinion. Indeed in position, outline, history, and all clinical characters, it resembled an encysted hydrocele of the testicle, and I confidently expected to draw from it the perfectly colourless or opalescent fluid characteristic of these cysts. However, on tapping it I found the cyst wall more resistant to the trocar than I have ever found these cysts to be, and the fluid (about five ounces in quantity) was of a deep straw-colour, and full of scales of cholesterine. The character of the fluid was conclusive evidence against the diagnosis of cyst, and showed that it was from a chronic vaginal hydrocele. The position and shape of the swelling were no doubt due to the effusion being limited to the upper part of the vaginal sac, owing to the obliteration of its lower part, probably from some long antecedent epididymitis and acute hydrocele. In the following case we have an example of just the opposite condition.

CASE 3. *Large encysted hydrocele simulating vaginal hydrocele.*—On Dec. 7th, 1889, Mr. M. G—— consulted me for a large left-sided hydrocele. He was a married man, forty-five years of age, and stated that he had noticed a swelling in the scrotum for fifteen years or more. It had troubled him a good deal for five years past, and especially

during the last two years. He had had it tapped seven times, and each time "pearl-coloured" fluid was withdrawn. I found a globular swelling in the left half of the scrotum, rather larger than the closed fist, fluctuating and translucent. The testicle was obscured by the swelling, but was indistinctly felt and plainly seen in the lower end of the front part of the swelling. The cord was normal, the vas occupying its usual position at the back of the vessels. It was clear, therefore, that I had not to do with vaginal hydrocele around an inverted testicle. On pressing Mr. G—— more closely as to the results of his previous tappings, he told me that on one occasion a small quantity of straw-coloured fluid escaped just at the end of the tapping. This cleared up the case, for it showed that, in addition to the spermatocele, there was a vaginal hydrocele; and that in tapping the cyst the cannula had been passed through the tunica vaginalis, and that when the cyst was emptied and the end of the cannula a little withdrawn, it had come to lie in the tunica vaginalis, the fluid in which then escaped. I tapped the swelling on the outer side, and drew off eight ounces and a half of "pearl-coloured" fluid. The left side of the scrotum was still a little larger than the right, and this was evidently due to fluid in the vaginal sac. By means of a long nozzled syringe, which fitted and projected beyond the cannula, I injected twelve minims of pure liquid carbolic acid into the cyst. The fluid I removed was faintly alkaline in reaction, specific gravity 1004, and gave a slight precipitate with nitric acid. Under the microscope it was seen to contain very numerous perfect spermatozoa, very few of which were moving. Had I seen this case before it had been tapped and before the character of its fluid contents had been demonstrated, I should have diagnosed a vaginal hydrocele on account of the way in which the testicle was obscured by or buried in the fluid—for, previous to tapping, this is the only sign by which a collection of fluid in the tunica vaginalis can be recognised. In some cases of this kind a marked difference in the tension of the two hydroceles enables the surgeon at once to recognise the condition; but in this case such a difference was not obvious, and the unusual position of the testicle in relation to the tumour, and the markedly globular outline of the swelling, were the sole points in which the appearances differed from those of vaginal hydrocele. I resorted to carbolic acid injection in this case, because Mr. G—— was intending to start on a voyage in four days' time, and yet was anxious, if possible, to have something done to secure a radical cure. Incision and excision were alike excluded, and in my experience the injection of carbolic acid has been less painful and less uncertain in its results than injection with iodine, and it causes so little disturbance that it does not necessitate any confinement of the patient. Mr. G—— referred to one troublesome effect of his hydrocele. He stated that when at home he suffered comparatively little inconvenience, except from its bulk, but that when away from home and continent he had a good deal of pain, which was so acute at times as to amount to "agony."

CASE 4. *Chronic vaginal hydrocele, with hernial protrusion of the sac.*—Mr. M——, aged fifty-five, came to me on Dec. 14th, 1888, with a smooth tense swelling in the left side of the scrotum the size of a turkey's egg, in which the testicle was lost to touch. The swelling fluctuated, was translucent throughout, except at the lower and back part, and presented all the usual characters of a chronic vaginal hydrocele, with one uncommon addition. Situated rather above the centre of the swelling in front was a prominent bulge like the pointing of an abscess, and about the size of a large marble. The fluid in this could be easily pressed back into the general cavity. I drew off through a cannula about seven ounces of the usual straw-coloured fluid. In two months' time Mr. M—— presented himself again for tapping, and I found just the same appearance as before. Tapping was repeated in April, in July, and at the end of August. Early in October I excised the sac, Mr. M—— making a perfect recovery. The swelling when I first saw it had been noticed about a month; it was not unusually tense. Although I have compared the appearance of the peculiar projection to that of a "pointing" abscess, the bulging was not of that nature, but is to be explained in quite another way. It is stated that minute villous processes project from the outer surface of the parietal tunica vaginalis into the scrotal coverings, and cases such as the above are explained on the assumption that one of these processes has enlarged into a kind of hernial protrusion of the sac. The condition is rare, but not clinically important.

CASE 5. *Encysted hydrocele, containing mucoid fluid.*—J. S——, aged fifty-seven, consulted me on Dec. 6th, 1888. He stated that thirty years ago he had a "swelled testicle," following upon gonorrhœa, but had never noticed anything abnormal since then until a month before, when, during a strain, his "purse came down." He was a strong, healthy man, a baker by trade. The scrotum was moderately enlarged; on the left side there was a small translucent vaginal hydrocele, which yielded, when tapped, eleven drachms of the usual clear straw-coloured fluid. On the right side there was a small, globular, fluctuating translucent swelling, above and quite distinct from the testicle. On tapping this I drew off nine drachms of brown mucoid fluid, very ropy, alkaline in reaction. This fluid became solid on heating or on the addition of nitric acid. It gave no precipitate with glacial acetic acid, or when gently heated after the addition of sulphate of magnesia. It gave a dense white precipitate with nitrate of silver, which was soluble in ammonia. On standing it yielded a hardly appreciable deposit, which was found on microscopical examination to consist of a few spermatozoa, granular corpuscles, free granules, and débris of spermatozoa. The resemblance of this fluid, except in the one fact of its containing spermatozoa, to the fluid sometimes found in ovarian cysts is very striking, and supports the view that these cysts are at any rate in some cases developed from the remnants of fœtal structures. I saw this gentleman in July, 1889, he was then quite well, the cyst not having refilled.

CASE 6. *Spermatic cyst free in the cord.*—J. G——, aged fifty-five, was admitted into Founder Ward, Middlesex Hospital, in September, 1888, while I was in charge of Mr. Hulke's beds. He had been aware of a swelling in the right side of his scrotum for some years; latterly it had increased, and troubled him more. He had twice had it tapped in the out-patient room, and each time spermatozoa were found in the fluid removed. The swelling was ovoid in outline, about the size of a duck's egg, above and apparently fixed to the right testicle. It was moderately tense, fluctuating, and translucent. The spermatic cord above it was apparently normal. I diagnosed it as a case of "encysted hydrocele of the testicle," and as tapping had failed to relieve him decided to perform a radical cure. This was done on Sept. 12th, when the nature of the cyst was revealed. The scrotum having been shaved and cleansed, I cut down on to the front of the cyst, which was exposed without opening the tunica vaginalis. To my surprise, I was able quite easily to shell the cyst out from the cellular tissue of the spermatic cord, and after its removal I found that the tunica vaginalis was quite intact. After irrigation with solution of bichloride of mercury the wound was sutured and dressed with alembroth wool. The wound healed by first intention, and the patient left the hospital quite well on Sept. 18th. The cyst was the size of a duck's egg, very thin walled, containing a watery fluid slight milky in appearance, which was found to contain abundant spermatozoa. Special interest attaches to this specimen, because the cyst was found to be free in the cord, and not connected either with the testicle or the epididymis; and yet it differs entirely from encysted hydrocele of the cord in containing spermatozoa. Three views may be suggested to explain this fact: 1. That it was really an encysted hydrocele of the cord, a dilated portion of imperfectly occluded funicular process of peritoneum, into which there was a leakage of semen. The easy way in which the cyst shelled out from the cord, and the absence of any adhesions to the testicle, epididymis, or vas deferens, negative this view. 2. It might be suggested that a cystic dilatation of a portion of the funicular process of the peritoneum had taken on the secretion of spermatozoa, because of its proximity to the testicle. There are no facts to support this view. 3. Most probably it arose from secretion into the tiny convoluted tube of the organ of Giraldès, which lies in front of the cord just beneath the upper part of the tunica vaginalis.

Queen Anne-street, W.

VACCINATION GRANT. — Mr. Philip E. Hill, M.R.C.S. &c., Public Vaccinator, Crickhowell District, Crickhowell Union, has received the grant (for the seventh time in succession) for efficient vaccination in his district.

ON TESTING FOR PROTEIDS AND MUCIN IN THE URINE.

BY ROBERT KIRK, M.D. EDIN., F.F.P.S. GLASG.,
PHYSICIAN TO THE DISPENSARY FOR DISEASES OF WOMEN, WESTERN INFIRMARY, GLASGOW.

IN THE LANCET of Dec. 12th, 1885, p. 1091, Dr. Auld pointed out the fact that heat often developed a haziness or turbidity in urines to which an equal volume of a saturated solution of picric acid had been added, although the same reagent produced no effect in the cold. He concluded that a boiling temperature was necessary to bring out the maximum delicacy of the test as a precipitant of albumen. At the discussion on Albuminuria at the Pathological and Clinical Society of Glasgow in 1884 I distinctly enunciated the same fact, but drew a totally different inference—namely, that the body so precipitated was not albumen, but mucin.[1] I now return to the subject because I believe that proof of this can be adduced which will be found unanswerable.

In the behaviour of urines with picric acid four classes of cases are to be distinguished. 1. A class in which there is no effect with the reagent either before or after boiling. 2. A class in which a turbidity produced in the cold remains much the same, if not absolutely the same, after boiling. 3. One in which a haziness developed in the cold increases more or less with heat. 4. One in which there is to be seen not merely a turbidity, but even a precipitate, at a boiling temperature, although in the cold there is no result at all.[2] It must be clear that if the precipitate consists of albumen in all these cases, there must be some difference in its character in the several instances which has not hitherto been explained. On comparing the effect of heat and picric acid with that of heat and acetic acid (the latter being employed according to the directions of Sir Wm. Roberts[3]), it was found that they were generally very nearly alike, but that there were cases in which the former produced more turbidity than the latter. According to Sir Wm. Roberts, heat with the acidulation he recommends throws down nothing but morbid albumen; whilst my contention is that it precipitates the mucin of the urine, which in this respect is different from the mucin of bile, and gives a visible result when this body is present in somewhat more than normal proportions. My principal task shall be to prove indisputably that such is the case. Here let it be premised that the quantity of urine employed in the following experiments was always 10 c.c., that it was invariably filtered beforehand, and that the investigation was limited to non-purulent urines.

The mucin dissolved, or in what the Germans call a "gequollen" state, in the urine, is maintained in solution by salts, and any acid added to precipitate it is opposed by the counteracting influence of these saline constituents. The behaviour of the body in the circumstances is very different from that which it manifests when in a weak alkaline solution. In the latter case the slightest acid added beyond the neutral point gives a precipitate. In the urine, on the other hand, a quantity of acetic acid equal to one-tenth of the urine employed is necessary to give a mucin reaction, and this only acts slowly and imperfectly. Hence the recommendation generally given to dilute the urine with water to expedite the effect. These simple facts seem to have been strangely lost sight of by several writers. It has been both asserted and denied, for instance, that picric acid precipitates mucin. The truth is that when a weak alkaline solution is only slightly acidulated with this acid a precipitate is at once thrown down; but in the urine, in the presence of the salts, the addition of even an equal volume of the saturated solution of the same reagent does not produce sufficient acidity to give a perceptible effect with mucin. The acidity of 10 c.c. of the picric acid solution is equivalent to not more than three or four drops of acetic acid. Hence the effect on the mucin is the same as if we diluted the urine with an equal volume of water and added these few drops of acetic acid, and this would never give any precipitate with mucin, except, perhaps, after long standing, or when there was a very large quantity of the substance present. This is a point which must be strongly emphasised. I believe that all vegetable acids act on mucin simply in proportion to the degree of acidity produced,[4] the density of the solution remaining the same. This applies to acetic, citric, picric, ferrocyanic, and also to the biliary acids. The same principle will be found to apply to the effect of heat with these acids on the same substance. The mineral acids appear to have a somewhat different effect on the same body, a small quantity of these being sufficient to throw down a precipitate of mucin, which is again readily soluble in excess, this being an important distinction between the latter and albumen.

The proof that heat and acetic acid throws down the urinary mucin is to be found by removing the salts by dialysis, when mucin (together with serum albumen and paraglobulin, if these be present) remains in the dialyser, and can be tested by the several reagents, apart from the disturbing influence of the former. When we dialyse urine into a large quantity of water (which it is better to renew frequently) the specific gravity falls in from twenty-four to forty-eight hours to 1001, below which it can scarcely be reduced. It is now found to be quite turbid in all cases, owing to more or less complete precipitation of the mucin; and it is to be remembered that paraglobulin, if present, is also thrown down by the process. For the testing proposed the operation must be stopped at the point where this turbidity first begins to appear, which is generally about 1003–4. If the urine at this density be already a little turbid, a specimen is set apart for comparison, and the result of the tests is determined by any increase of opacity over this standard sample. This is better than attempting to filter it, for it comes quite turbid through the filter. The first urine in which I employed this process, now nearly three years ago, was that of a boy of seven, in whom, during a fortnight of high fever, there developed a marked dulness over a large portion of the right lung posteriorly at the base, which did not disappear for several months. The urine during the febrile stage, when it was daily examined, was always clear, high-coloured, of more than normal acidity; specific gravity 1023–4. The filtered urine gave no albuminous zone with nitric acid, even after long standing, and no precipitate with picric acid, even by the "contact" method, if the observation were limited to a few minutes.[5]

Heat and acetic acid, after Sir Wm. Roberts, on the other hand, at once gave a distinct turbidity; heat and picric acid a rather more pronounced one. It was remarkable that if the quantity of acetic acid was increased, the turbidity became greater, only reaching its maximum with the addition of four or five drops. We are told by Sir Wm. Roberts that by using the small and definite quantity of acid he recommends we avoid provoking a mucin reaction. If so, was the increase of opacity produced by the second and subsequent drops of acid due to mucin and not to albumen? If the former, obviously there was a very narrow boundary line between the degree of acidulation necessary to precipitate albumen and that required for mucin. If the latter, clearly his instructions are defective, a much stronger acidulation than that he recommends being indispensable to throw down all the albumen in some cases. A noticeable feature in connexion with the heat precipitate was that it did not appear till the boiling point was reached, or even a few seconds afterwards. This has been observed in the urine before by Lauder Brunton and D'Arcy Power. Not only the heat precipitate with acetic, but that also with picric acid, came quite turbid through the filter, and the liquid could not be clarified even by repeated filtration. Acetic acid in the cold after a certain time gave a very pronounced result. Further, although one, and even two volumes of the picric acid solution gave no reaction in the cold, three or four volumes produced a distinct opacity, even after so much dilution. On the principles already laid down we see how this would be so with a certain quantity of mucin; for with three volumes of picric solution there might

[1] See report of discussion, p. 113.

[2] These variations may perhaps account for the singular statement by Neubauer and Vogel in their work—viz., "Normaler Harn giebt übrigens beim Kochen mit Pikrin säure einen starken flockigen Niederschlag," eighth edition, part i., p. 124.

[3] See the same discussion, p. 22, and his well-known work on Urinary and Renal Diseases.

[4] Possibly this statement may be liable to slight modification.

[5] After sufficient time has elapsed, picric acid will by this method give a mucin reaction not to be distinguished from an albuminous one.

be sufficient acidity, combined with dilution of the salts, to produce a visible effect. Finally, the urine was very difficult and slow of filtration, and in view of all the circumstances I was convinced it contained nothing but mucin.

The following were the results obtained after dialysing this urine to 1003—4. In the cold not only did picric acid throw down a dense cloud, but a few drops of acetic acid had now more effect than one-tenth of a volume had exercised previously. It was observed, however, that one or two drops of vinegar (3½ per cent. acid) or even one drop of acetic acid, were without effect in the cold. Here then was the opportunity of trying heat with this small amount of acid, and it was at once found that it had a marked effect, quite comparable to that of the larger quantity of acid, or of picric acid, in the cold. The effect of nitric acid in the novel circumstances was extremely interesting and important. It gave no result at the junction of the two liquids, but a distinct zone higher up, near the bottom of the upper third of the column of urine (I should here state that the urine had given the same result before dialysis). A few drops of dilute nitric acid (1 in 20) gave a distinct precipitate which, however, disappeared on adding a few drops of the strong acid. What was the explanation of the facts elicited under these new conditions? The negative result with nitric acid seemed to prove conclusively the absence of albumen, for after dialysis its delicacy as a test is greater than before. It could not have failed to give a reaction had the pronounced effect of heat and dilute acetic acid been due to albumen. Further, albumen is not thrown down in the cold by a drop or two of dilute nitric acid; on the contrary, it requires a considerable amount of the strong acid to do so, more, in fact, than sufficed to make this precipitate disappear. It may be thought that the question as to mucin or albumen might have been solved by removing the precipitate produced with cold acetic acid by filtration, and subsequently testing for albumen. But this was found quite impossible; neither this nor the heat precipitate could be got rid of in this way, one strong proof that both were mucinous. Further, they were both allowed to stand for several days, but in neither would the precipitate subside. Finally, various insoluble powders, as barium sulphate, magnesia, &c., were added, in the hope that the mucin might adhere to these and so be capable of filtration, a device which proved tolerably successful, but it was found that when a trace of albumen was purposely added, it also was carried away mechanically under these circumstances. These attempts to remove the mucin were repeated in numerous subsequent observations, and with a similar result. I have often been astonished at the dogmatic assertions made about precipitating and removing mucin from the urine. All of these, which do not at the same time remove a trace of albumen, I have found futile. We are told, for instance, to add acetic acid, allow the urine to stand twenty-four hours and filter; but this does not even precipitate the whole of the mucin, while the portion of it which really is thrown down refuses to be removed by the filter. And the same may be said of any other proposed method of removing mucin and leaving a trace of albumen.

If the conclusion that the body above referred to is mucin be correct, it appears that it requires a higher temperature and stronger acidulation to precipitate it than is necessary in the case of albumen. Applying the same process next to urines which were regarded as strictly normal, the result was that in all cases after dialysis to sp. gr. 1003, heat and one or two drops of 2 or 3 per cent. acetic acid gave a distinct turbidity, quite the same as was obtained in the cold with a somewhat larger quantity of acid. The precipitate was of the same character in both cases, and came quite turbid through the filter. In testing after dialysis one caution is necessary. A trace of phosphates may remain, giving an opacity with heat, and requiring acidulation to dispel it as well as to precipitate the mucin. It may be added that some colouring matters also, probably of a colloidal nature, are not altogether separable by dialysis. If the turbidity so produced in dialysed urine were due to albumen, then the method is a better one for demonstrating its presence than that of Senator—viz., by evaporating the urine at a low temperature. I found on neutralising the urine and cautiously concentrating to a fourth or fifth that the result with heat and acidulation afterwards was less than that obtained after dialysis. In both I believe the opacity is due to the same body (mucin), and that normal urine is quite free from albumen, but more remains to be said on this question.

Dr. Oliver has expressed the belief that heat and acetic acid will throw down mucin if bile salts are present.[6] However natural it seemed to attribute such an effect to the bile salts in our ignorance of the behaviour of the urinary mucin with heat, the explanation is erroneous; it would be a wholly anomalous and inexplicable circumstance if the biliary salts or acids had any such power over mucin. The simple truth is that the result entirely depends on the degree of acidulation, as I have proved over and over again with jaundiced urines rich in mucin, for the effect of heat was always found to be greater after dialysis to 1003 than it had been in the undialysed urine. Experiments with both urine and bile proved, what was scarcely necessary, that the bile salts dialyse readily, and that there was a very slight trace of them left at sp. gr. 1003. At the same time, it was ascertained that biliary mucin was not precipitable by heat with any degree of acidulation; whatever the quantity of acid used, the turbidity at the boiling point seemed rather less than in the cold. This constitutes, therefore, a radical distinction between the latter and urinary mucin. It may be added that both forms of mucin passed to a considerable extent into the dialysate, although it is said that this body does not do so.[7] The pathological urines examined by dialysis within the last two years have been taken from a wide range, including fevers, inflammations, puerperal affections, jaundice, Bright's disease, and functional albuminuria. One important fact elicited for a time proved very puzzling. There was a class of cases in which, after dialysis, heat gave a flaky precipitate which could be filtered off perfectly, leaving an absolutely clear filtrate. This was found to yield no result with any quantity of acetic acid, and seemingly the mucin precipitate had been got rid of. But why this result in these cases, and not in others? It was found that cold picric acid always gave a turbidity in the urine in such cases, and further that the presence of albumen could also be shown by nitric acid, after dialysis, if not before. The only conclusion at last found possible was that in the presence of albumen the mucin precipitate was capable of being removed by filtration, whether from mechanical adhesion to the albuminous one, or other cause. The same fact could generally also be shown in these cases without dialysis, by using a larger quantity of acid, and without any additional acid at all when there was a larger quantity of albumen present.

Numerous observations showed that the appearance of albumen in the urine was almost invariably accompanied (except, perhaps, in cases of actual nephritis) with a marked increase of mucin.

Dr. Pavy has already drawn attention to the frequent occurrence in the urine, in cases of functional albuminuria, of a form of albumen precipitable by an organic acid in the cold, and this I regard as identical with the mucin of normal urine, and of all the pathological urines I have examined. As has been pointed out by Dr. Oliver, bile salts are generally present also in increased quantity in such cases, so that we constantly have as concomitants all three—albumen, increase of bile salts, and increase of mucin. Dr. Oliver has further shown that an organic acid precipitates albumen in the cold in the presence of the bile salts. It is very remarkable, however, that this plays but a small part in the production of the result so often obtained in the urine with organic acids; for, after dialysis, when these salts have been removed, the precipitate thrown down by cold acetic acid is almost invariably as great as before. I have only me with one or two cases in which it was less after dialysis, thus proving that it is almost invariably due to the presence of a body precipitable by the acid without the aid of bile salts.

(To be concluded.)

[6] Bedside Urine Testing, third edition, p. 250.
[7] Foster's Physiology, fourth edition, p. 724.

UNIVERSITY COLLEGE HOSPITAL.—Her Royal Highness the Duchess of Fife will open a grand bazaar on Thursday, June 5th, at 12 noon (instead of on June 4th, as previously advertised), in aid of the funds of University College Hospital, which will be held in the grounds of University College, Gower-street, W.C. The bazaar will be open for two days, and will be under Royal and distinguished patronage.

A CASE OF FRACTURE OF THE VAULT OF THE SKULL, WITH MINUTE PUNCTURE OF A BRANCH OF THE MIDDLE MENINGEAL ARTERY AND LONG DELAY IN ONSET OF SYMPTOMS, ETC.

BY W. ARBUTHNOT LANE, M.S., F.R.C.S.,
ASSISTANT SURGEON, GUY'S HOSPITAL, AND THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

W. J——, aged forty-five years, was admitted into Guy's Hospital on March 14th, 1890, at half-past twelve o'clock. He had been drinking heavily for some days, and when very drunk on the evening of the 13th at about 10 o'clock, he fell down a flight of eight or nine stone steps on his back. It was not observed that he struck his head, but the evidence on this point was unreliable. He was carried up to the hospital on a stretcher, and was seen by the house surgeon, Mr. Paget. He found that the man smelt of drink, and was apparently recovering from a fit of intoxication. He was irritable, and objected strongly to being examined. The pupils acted well and were equal. He examined the power in the legs and arms, and found that both sides were moved vigorously and spontaneous, and that there was no loss of power. The only noticeable feature was the fact that the left eye could be opened with comparative ease, while the patient vigorously opposed any attempt to examine the right one. Beyond this there was no obvious facial paralysis. His pulse was 65 to the minute, and his respiration appeared normal in frequency. There was no scalp wound. On the strength of the history, together with the loss of power in the left orbicularis palpebrarum, he was taken in. At 6 P.M. facial paralysis on the left side became obvious. It was still only partial, however. I was asked to see the man at 10 P.M., as the symptoms had changed rapidly. The patient had then complete hemiplegia on the left side, with no rigidity. The pupils were equal, and both reacted slightly to light. Though they were examined frequently between this period and the operation, about half an hour later no difference could be observed between the size of the pupils, though later they reacted even more feebly to light. His respiration was normal in frequency. He was not conscious, but if irritated moved his right arm and leg furiously with apparently completely normal force, and used very foul language. There was marked ankle clonus on the left side and a transient clonus on the right. On ringing the skull with the finger or, better still, with the pleximeter, it rang dead, and this loss of ring was most marked on the right side about the centre. Over the temporal area the soft parts covering the bone were found to be thicker than on the opposite side. A fissure limited to the side of the skull and accompanied by hæmorrhage from a small branch of the middle meningeal was diagnosed, and after a very short delay, necessary to inform his friends, he was put under chloroform. During this short interval some diminution in the energy with which he used his right side was noticed. The floor of the temporal fossa was exposed, and a fissure which extended through the great wing of the sphenoid, the squamous portion of the temporal and the parietal bone upwards and backwards for about three inches. Its anterior extremity reached to within half an inch of the upper margin of the zygoma. On removing bone freely with a trephine and Hoffmann's forceps a large, firm clot was exposed, which extended roughly over the lower three-fourths of the motor areas. It extended backwards over the supra-marginal and angular convolutions, but it did not descend lower down than the level of the upper temporo-sphenoidal convolution. Most of the clot was of a firmness which I had never before seen in hæmorrhage from the middle meningeal. The greatest difficulty was experienced in removing it from the skull and dura mater. No squirting of blood was observed, but a little red blood oozed very slowly from between the bone and dura mater at the lower end of the fracture. On removing more bone the anterior branch of the middle meningeal artery was seen to present a small puncture from which blood trickled. This very gradual escape of blood accounted for the very slow onset of symptoms and for the condition of the clot. After the complete removal of the clot, though the brain pulsated, it did not expand to any apparent extent. At the commencement of the operation the pulse was 46, and it rose to 80 at the end of the operation. During the night he was very restless, and his movements had to be watched and controlled. On March 15th the paralysis of the left side was as complete as before the operation. He moved his right limbs and the right side of the face freely. The pupils were equal, and reacted to light. The temperature in the evening was 80°, and the respiration 34. On the 16th, at six o'clock in the morning, twitchings of the left side of the face and left arm were observed, and this became more violent as time went on. The right eyelid twitched a little in association with the left. There was no twitching of the left leg, in which a clonus was obtained as before the operation. The movements of the left arm were almost completely limited to the forearm, and consisted of rapid flexions and extensions of the thumb and fingers. After a time the arm moved but slightly, though it was held rigidly in a position of flexion and adduction. Supposing that the condition was consequent upon inflammation of the brain about a contused area, and that such inflammation might be alleviated by diminishing tension, by dividing the dura mater, or by incising the contused areas, at 2 P.M. I removed the stitches, opened up the dura mater freely, and exposed the brain. I was surprised to find that there was only one small area of contusion of no great severity, and limited to a portion of the third frontal convolution and a small adjacent piece of the first temporo-sphenoidal. The whole surface of the brain exposed had an unusually dark appearance, and was apparently inflamed. The pia mater and arachnoid were not obviously inflamed. I satisfied myself with incising the small contusion, and by leaving the dura mater gaping, which it did to a considerable extent. During the day the pulse and respiration increased; in the evening the pulse was 132, and the respiration 48. The temperature fluctuated between 99·4° and 103°. The twitchings of the face occurred at longer intervals after the operation. The pulse and respiration continued to rise till the patient died at 9.30 on the following morning. At 2 A.M. the temperature was 103·8°; pulse 152; respiration 56. At 6 A.M. the temperature was 102·6°; pulse 120; respiration 54. Though the symptoms were certainly improved by the operation, the improvement was very transitory. There was no obvious optic neuritis, but there was some uncertainty, owing to the cloudiness of the media. At the necropsy, the small superficial contusion on the adjacent portions of the third frontal and superior temporo-sphenoidal convolutions observed at the operation was seen to be very limited. Two or three minute sub-pia-matral hæmorrhages were seen on the surface of this half of the cerebrum. The grey matter over at least the lower three-fourths of the motor areas, as well as of the cortex forming the angular and portions of the adjacent convolutions, presented a blurred appearance and an ill-defined outline; especially in some places minute hæmorrhages were seen in the grey matter of the cortex. The naked-eye appearances were quite unlike anything one sees resulting from contusion alone, except of course in the small patch observed at the time of the operation. The inflammatory changes were distinct under the microscope.

Remarks.—This case appears to present several points of sufficient interest to deserve to be put on record. First, there was the small puncture in the wall of the meningeal artery and the consequently long interval which elapsed between the period of the injury and the onset of any definite symptom—namely, of the facial paralysis, or rather paresis, twenty hours after the fall. Secondly, the equality of the pupils and their very slight reaction to light, even when the symptoms of compression were most advanced. Thirdly, the remarkable and complete limitation of the paralysis to the one side of the body, the other side of the body at the same time seeming to be as vigorous and powerful as ever. Fourthly, the acute inflammation of that portion of the cortex which had sustained for so many hours the pressure exerted upon it by the gradually increasing clot, and the limitation of the inflammation to this area. It was quite apparent that this inflammation did not result directly from the contusion, but was due to the mechanical influence resulting from the clot. It is possible that the vessels in the cortex may have been emptied of blood for a sufficiently long time to determine the onset of inflammatory changes on their again becoming suddenly filled with blood when the pressure exerted by the clots was removed by operation.

Lastly, I would call attention to a symptom of fractured skull which this case presented in a marked manner, and which I have found of the greatest service in determining the presence of a fracture of the skull when even a local thickening or bogginess of the subcutaneous tissues about the seat of fracture was absent. I refer to the loss of ring on percussion which such a crack in the skull produces. I have no doubt that this simple but most important symptom must be familiar to many surgeons, though, curiously, I have known no one else use it, nor have I seen it mentioned in any work on fractures. The absence of ring, any local bogginess of the soft parts being allowed for, is a very certain indication of a fracture, and by carefully tapping with the finger or pleximeter, the extent and position of the fracture can generally be determined with accuracy.

St. Thomas's-street, S.E.

DILATED URACHUS TREATED BY INCISION AND DRAINAGE.[1]

BY REGINALD PRATT, M.D.LOND.,
AND
C. J. BOND, F.R.C.S.ENG.

W. J. P——, a gentleman aged fifty-four years, consulted Dr. Pratt on June 8th, 1889, complaining of pain and distension in the bowels and increasing general weakness. He was quite well until the previous November, when he was taken ill with pains in the lower part of the bowels; he kept in bed for three weeks and in the house for four months. He could not account for the onset of the disease in any way; there had been no blow, lifting of heavy weights, or straining of any kind. His occupation was that of a storekeeper and clerk near New York, where he had lived many years. He was married and had three children; the eldest died at three years of age from pneumonia; another was drowned at birth; the other died at eleven months from convulsions. He had gonorrhœa when twenty-one years of age, but never had any symptom of syphilis. He led a very intemperate life until seven or eight years ago; since then he had been a moderate drinker. A grandmother and an aunt were supposed to have died from cancer of the bowels; the patient's father, a grandfather, three brothers, and one sister had died from consumption. The abdomen was found to be much distended in the lower half in front, the distended area was dull on percussion, and extended as high as three fingers' breadth above the umbilicus and down as far as the pubes, laterally on each side as far as vertical lines drawn through the anterior superior iliac spines, projecting rather more to the left than to the right side; the flanks were perfectly resonant, the tumour fluctuated. The circumference of the abdomen between the umbilicus and pubes measured 41½ in.; nine months ago it was 34 in. He weighed 182 lb., his weight for the last twenty years having been 175 lb. Height, 6 ft. 1 in. The lungs appeared to be normal. The cardiac apex beat was in the left nipple line; the first sound at apex was weak, no murmur. Pulse 84, regular, small, and compressible. Liver dulness extended two fingers' breadth below the margin of the thorax, the upper limit was normal. No trouble with micturition or defecation, except slight constipation. Urine acid, no deposit, pale sherry colour, sp. gr. 1020, no albumen, no sugar, urea 1·45 per cent., quantity about normal. A catheter was passed immediately after micturition, only a few drops of urine being withdrawn. Examined per rectum the prostate was not enlarged, but there was a fulness filling up the left side of the pelvis. On June 15th, 1889, the tumour was aspirated, and about one drachm of a gummy, semi-transparent fluid withdrawn which blocked the tube; this contained only a trace of albumen, but a large quantity of mucin, as shown by the precipitate it gave with acetic acid, which was soluble in nitric acid; examined microscopically, it showed many leucocytes. The temperature was ordered to be taken. On June 30th, the temperature was about 99° in the morning, at or above 100° in the evening. There had also been profuse night sweats. Mr. Bond saw the patient with Dr. Pratt on June 30th, and it was decided to perform abdominal section.

On July 9th, 1889, Mr. Bond made a four-inch median incision midway between the umbilicus and the pubes. After dividing the linea alba a very thick membrane was reached resembling the peritoneum much thickened by tubercular peritonitis. This proved to be the outer wall of the cyst; it was divided, and a very large quantity, of which over a gallon was measured, of a ropy, gummy, semi-solid, laminated substance, having the appearance and consistence of semi-decolourised fibrin, was partly squeezed and partly drawn out in stringy layers. A considerable quantity was left in the cavity, as any attempt to sponge it off the inner surface of the cyst wall left a red raw surface which bled freely, the blood being remarkably fluid. On exploring the cavity with the hand and arm, it was found to extend upwards to and beneath the liver, and downwards into the pelvis; the intestines could be made out behind and at the sides of the cyst, though shut off and separated from it. The cavity of the peritoneum was not opened. A Keith's glass drainage-tube was placed in the wound reaching to the floor of the pelvis, and the rest of the incision closed. Strict antiseptics were used and a sublimate wool dressing applied over the tube and the wound. The fluid was kindly examined by Messrs. Richardson and Co., who reported that it contained not more than traces of albumen, that the whole was practically mucus and fibrin with a large predominance of the former; microscopic examination showed abundance of mucus-corpuscles with which were mixed some blood-corpuscles. The after progress of the case was very satisfactory; the wound remained aseptic, and large quantities of the mucoid material were aspirated or squeezed out through the tube, which was removed, cleaned, and replaced twice a day. The cyst walls shrank very considerably, the evening temperature did not reach the normal until six weeks after the operation, and the night sweats continued for several weeks also. In December, 1889, on his departure for America, he seemed to be in good health, could walk nine miles at a stretch, and his appetite was excellent; there still remained an irregular shaped cavity with thickened walls, capable of holding half a pint of fluid. Mucoid material was secreted daily; the discharge of this, however, which was quite sweet, did not seem in any way to depress the health. In a letter dated Feb. 27th, 1890, the patient says the wound is still kept open by a glass tube, it discharges clear watery fluid with very little of the jelly-like material, the discharge is not at all offensive, and the general health is excellent. He works thirteen hours a day; his weight is 175 lb., and he measures 36 in. round the abdomen, between the umbilicus and pubes. He has strict orders not to allow the wound to close.

The diagnosis rested between hydatid tumour, encysted peritonitis (tubercular or cancerous), a tumour which had undergone mucoid degeneration, and an enormously dilated urachus. The detection of mucus in the contents of the cyst excluded hydatid tumour as well as encysted peritonitis, for, as Mr. Shattock, who kindly examined some of the fluid, writes, it is impossible for a mucous fluid to be secreted by a serous membrane. The presence of a myxomatous tumour was negatived at the operation. The case must therefore be one of immensely dilated persistent urachus.

Leicester.

[1] A paper read before the Leicester Medical Society.

A CASE OF

SUPRA-PUBIC LITHOTOMY WITH SUTURE OF THE BLADDER.

BY A. R. ANDERSON, F.R.C.S.,
SURGEON TO THE GENERAL HOSPITAL, NOTTINGHAM.

F. W——, aged ten, was admitted into hospital with supposed stone in the bladder. On being questioned, he gave the usual history of such a case, the symptoms having certainly been present for a year—perhaps for longer,—but his suffering was slight and he did not complain loudly. The urine was clear, acid, with a slight cloud of mucus; no albumen and no deposit. A stone was easily felt in the bladder on passing a sound. On Nov. 5th, 1889, I performed supra-pubic lithotomy. A rectal bag was used and distended with five ounces of water. A catheter was then passed into

the bladder, and, after drawing off the urine, about six ounces of warm water were injected, when the bladder could be seen to rise distended nearly to the umbilicus. An incision about two inches long was made in the middle line, with its end well over the pubes, and a dissection between the muscles exposed the bladder, which rose into the wound. The bladder wall was then incised to the extent of half an inch with a sharp-pointed scalpel, this being followed by a gush of the water which had been injected. On introducing the finger, the stone, a small one, was felt, and easily removed. The bladder was then seized, and, by means of a curved needle, silk threads were passed at each end of the incision to hold it forwards. Seven Lembert sutures of fine carbolised silk were then passed through the walls in such a way that the sutures at either end lay well beyond the angles of the wound. After the sutures were tied the bladder was fully distended with water, and it was seen that none escaped. Finally, a small tube was put in at the lower angle of the abdominal wound which was closed with four or five sutures. The parts were dusted with iodoform, and a mercuric wool dressing applied. The peritoneum was not seen throughout the operation. At 8 P.M. the same evening he was quiet and free from pain, and had passed urine naturally through the urethra. The next day (Nov. 6th) he complained of some pain in the chest and cough. He continued to pass urine without difficulty. The temperature that evening, which had hitherto been normal, rose to 101·4°. On the 7th he was found to have acute pneumonia on the left side. He was much troubled with frequent and distressing cough. We now found from his mother, what had not previously been discovered, that he had been absenting himself from school, and, fearing punishment when he got home, he had for two nights previously to his admission into hospital slept out of doors. The wound was dressed, and looked quite quiet; there was no discharge, and it was healing. The tube was removed. Temperature 103·4°. He continued to pass urine naturally. On the 9th the cough and fever were troubling him a great deal. He had much dyspnœa. The wound was dressed and had healed, and the abdominal sutures were removed. The following morning, on awaking from sleep, he had a violent and prolonged fit of coughing, lasting half an hour. On removing the dressing a portion of the skin wound was found gaping. There had been no bladder trouble. On the 12th he began to recover from the attack of pneumonia, and his temperature suddenly fell to below normal. From that date he made an uninterrupted recovery. The portion of the skin wound that had opened healed by granulation. He never had any urinary trouble, and is now well. The boy was shown to the Nottingham Medico-Chirurgical Society just a month from the date of his admission into hospital.

The following points may be noted in connexion with this case. 1. It was one which was most favourable for the success of the particular operation which was performed. Thus the urine was quite healthy, clear, and free from deposit. There was no albumen and no sign of renal disease. The boy's suffering was slight, and the stone small. 2. The operation was put to a severe test by the occurrence of acute pneumonia on the second day. Not only was there pyrexia to contend with, but a frequent and violent cough, which I feared might prove especially disastrous to a wound in this situation. As a matter of fact, although the bladder wound healed without hindrance in spite of this drawback, yet the cough spoiled the brilliancy of the result, for on the night of the fourth day, after the sutures had been removed and the wound healed, the violent fit of coughing which ensued on his waking from sleep was, in all probability, answerable for the tearing open of that portion of the wound that subsequently healed by granulation. I firmly believe that if it had not been for the pneumonia he would have been up and about at the end of a week. 3. The third point I would mention is that no catheter was employed, nor had one to be used subsequently. The calculus was composed of oxalate of lime, with an unusually rough and spiculated surface.

Nottingham.

LIVERPOOL MEDICAL INSTITUTION.—At a meeting of the members of this institution the following resolution was adopted: "That, in the opinion of this meeting, it is desirable that the physicians, surgeons, and medical officers of all non-medical charitable institutions should receive some pecuniary recognition of their services."

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

MENINGITIS AND COMPULSORY EDUCATION.

BY B. LANGRAN, L.R.C.P. ED., L.R.C.S.I., &c.

THE following is a brief account of three cases of meningitis which it has been my misfortune to attend within the past month.

CASE 1.—G. S——, aged eleven years, had been ill for three weeks before I saw her in consultation with the medical man then in attendance. At the time of my visit she was very pale and much emaciated, and complained constantly of her "poor head"; the abdomen was retracted, but there was an entire absence of vomiting, nor was she at any time convulsed. She took her nourishment well whenever it was offered, but asked for nothing. A week afterwards she passed into a semi-comatose condition, in which all her motions were voided involuntarily, but continued to take a considerable quantity of milk. The coma became more profound, yet she lingered on for a fortnight longer, when she passed quietly away. The family history was good, but the child herself had never been robust and was of a very nervous temperament.

CASE 2.—M. C——, aged ten years, was first attacked with giddiness followed by convulsions and vomiting, after which she was for a few days comparatively well, complaining only slightly of her head; the convulsions, however, returned, and she cried out constantly of the pain in her head. Gradually becoming worse, she passed into a state of stupor, in which she remained till the time of her death—three weeks from the initial symptom,—the muscles of deglutition being paralysed for twenty-four hours before death. This child previously to her illness had been a strong, healthy, rosy-cheeked little girl, with a good family history.

CASE 3.—E. D——, aged twelve years, complained of malaise and headache on Feb. 28th, and at 4 o'clock A.M. on March 3rd had a violent convulsion followed by vomiting. The convulsive movements recurred every few hours during the day, but ceased that night, when she became semi-comatose. The stupor deepening, she sank rapidly, and died at 2 P.M. on the 5th, six days from the beginning of the illness. In this case the family history was not so good, and the rapidly fatal termination may possibly be in some measure attributed to the poverty and unhealthy surroundings of the child.

The above cases corroborate the generally acknowledged facts—first, that the diagnosis of meningitis in the early stage is usually a matter of great difficulty; and, secondly, that the symptoms presented throughout the disease vary considerably. In the first case there was an entire absence of both vomiting and convulsions, whilst the duration of life for six weeks is also unusual; the second is a more typical case, but in it, as in Case 3, the patient vomited only once. In the latter the constantly recurring convulsions so rapidly passing into coma and death present a great contrast to the first case. In two particulars they all agreed—a well-marked tache cérébrale and the peculiar sighing respiration. As regards the treatment adopted, in two cases the heads were blistered, in all three, cold affusions were employed, whilst internally bromide and iodide of potassium, mercury with chalk, calomel, &c., were variously used. Post-mortem examinations were not obtainable, and in no case could I discover tubercular disease of any other organ; yet I am inclined to think that Cases 1 and 3 were of tubercular origin. The patients resided at distances varying from two to six miles from each other, and all three were actively preparing for the School Board examinations, and attending different schools. Further, each of them, during delirium, spoke of school tasks, teachers, &c., from which (in the absence of any other assignable cause) I conclude that educational pressure was in these instances the exciting cause, and I have little doubt that the present compulsory education system is not only highly injurious, but productive of many cases such as I have recorded. That children must all at a certain age attain a certain

standard or the school and teachers suffer loss, is a barbarous regulation, as everyone with any knowledge of children is aware that they differ as much in brain power as they do in personal appearance. Fear of punishment or, if sensitive, dread of disgrace, urge many of them to attempt tasks far beyond their power, and the result is too often utter collapse, either physically or mentally.

Axminster, Devon.

STRICTURE OF THE RECTUM FOLLOWING UPON FISTULA IN ANO.

By G. R. GILRUTH, F.R.S.E.

MRS. —— came under my care in 1876, as she was suffering from a troublesome discharge of pus from the rectum. She had previously been operated on for fistula in ano. An examination revealed the presence of a large abscess situated on the left side of the anus. With the assistance of Dr. Alexander Moir the abscess was opened and a large quantity of pus evacuated. As the opening into the rectum could not be found, the point of the bistoury was pushed through its coats and the sphincters divided by a free incision. Several sinuses were found running deeply in different directions. The case was treated in the usual manner, and the sinuses were syringed out with carbolic lotion for a long time. Some improvement resulted from this treatment. The patient, however, left Edinburgh, and was not again seen till 1888. This time she came to consult me on account of the pain and difficulty she felt in evacuating the bowels. The difficulty had become so great that purgatives had almost always to be taken. On examination, it was found that the sinuses had all healed soundly, and that there was no trace of the fistula. On passing the finger into the rectum, a broad rigid band could be felt corresponding to the left half of the internal sphincter, and behind this point there was a large sac, and into this pouch, the patient said, as Brodie long ago remarked, the fæces seemed always to lodge. The opposite side of the sphincter was soft and yielding. Bougies were used, and gradually increased in size. There was still, however, some difficulty with the stools. On May 25th, 1888, an incision was made through the thickened portion of the gut, and on May 28th the patient had a free natural stool. Up to the present date I believe she continues well.

The interesting points in the case are—first, the healing of the fistula and the sinuses; secondly, in the plastic matter that had been thrown out becoming organised, and going to form the stricture portions of the gut.

Edinburgh.

ON SENSATIONS REFERRED TO THE MOUTH.

By J. HILTON THOMPSON, M.D.VICT.,
LATE SENIOR RESIDENT MEDICAL OFFICER TO THE CHILDREN'S HOSPITAL, PENDLEBURY.

THE following case appears to be similar in some respects to those described by Dr. W. B. Hadden in THE LANCET of Jan. 25th, 1890.

Mrs. B——, a lady forty-nine years of age, noticed about five months ago tingling sensations in the tongue, the mouth at the same time feeling hot and dry. The tingling increased in intensity, until the tongue felt as though the ends of numerous small wires were being pressed against it. This sensation was more marked in the posterior two-thirds of the organ. The sensation of heat also became more marked, until the tip of the tongue, palate, and gums seemed to burn. These sensations were worse at night, and interfered materially with the patient's sleep, she also stated that she frequently suffered from a feeling of distension in the epigastric region, also from scalding eructations, occasional palpitation, and pain between the scapulæ. On examination I found the patient anæmic and depressed. The thoracic organs were apparently normal; the liver was not enlarged, but there was slight pain on pressure over it; the stomach was dilated, but not painful on pressure; the tongue small, dry, and covered with a thin white fur, through which large and congested papillæ projected at the sides and tip; bowels constipated; kidneys normal; old laceration of perineum and cervix. The patient had no teeth in the upper jaw, but wore artificial ones attached to a suction plate; this, however, did not appear to have anything to do with the symptoms complained of, for they continued after the plate was removed; sense of taste less acute than normal, but not markedly affected. Supposing the condition of the mouth to be secondary to a disordered state of the digestive organs, I prescribed in the first place terebene purus, hoping that it would relieve distension and arrest the cultivation of organisms. The bowels were regulated by means of podophyllin and small doses of calomel. At the end of a week the patient had improved, the above treatment was stopped, and a mixture of liquor pepsini porci, with hydrochloric acid, ordered; massage over the liver performed every day; diet limited to starches and milk. The patient improved rapidly, and now the pricking and burning sensations have quite disappeared.

In this case there was nothing in the condition of the mouth or tongue to account for the symptoms; but the fact of the sensations diminishing in intensity, and finally disappearing as the condition of the digestive system improved, make it probable that the sensations complained of were the result of an irritant acting on the nerve endings in the stomach, and that the resulting sensations were referred not to the seat of the irritation, but to the tongue. When it is remembered how closely united are the origins of the vagus and glosso-pharyngeal nerves in the medulla, and how intimately connected in the first part of their course, we would appear to have a reflex tract that would at least account for sensations of pain in the posterior part of the tongue; moreover, we know that irritation of the fibres of the glosso-pharyngeal in the posterior third of the organ produces nausea and vomiting (Volkmann), this is the result of a reflex from tongue to stomach, consequently a return reflex from stomach to tongue is all the more probable.

Brooks's Bar, Manchester.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

THE LONDON HOSPITAL.

CASES OF OPERATION FOR DISEASE OF THE HIP-JOINT IN WHICH THE UPPER EPIPHYSIS WAS SEPARATED; REMARKS.

(Under the care of Mr. RIVINGTON.)

THESE cases of separation of the upper epiphysis of the femur are an interesting contribution to the subject of diseases of the hip-joint, and illustrate a condition for which early operation is desirable. It is not possible to give the average percentage of hip-joint disease in which this separation may be expected, but the Committee of the Clinical Society on diseases of that joint found that necrosis occurred in nearly 60 per cent. of the specimens examined. The case of simultaneous excision of both hip-joints is especially interesting; there are few on record.

CASE 1. *Excision of the hip-joint; recovery with a serviceable limb; remarks.*—Wm. H. J——, aged fifteen, clerk, was admitted under the care of Dr. Gilbart Smith. He had enjoyed fairly good health all his life, but had suffered from bronchitis. Since leaving school, two years before, he had been an under clerk. The present illness commenced on Nov. 22nd, 1888, when he experienced severe pain round the right hip-joint, for which he could not assign any cause. He was treated by a doctor outside with blisters, but, getting rapidly worse, he came to the hospital and was taken in as a case of "rheumatism." He was transferred from the medical to the surgical wards on Dec. 8th. All the movements of the joint were performed with perfect ease, but just above and behind the great trochanter there was a tender swelling. Aspiration at this spot detected pus, and through a free incision a large quantity was evacuated. The resulting cavity was well washed out with carbolic lotion, a drainage-tube was inserted, and the wound was dressed with iodoform and wood wool. Extension

was applied by splint and weight, and quinine was prescribed. At this time the patient was in a very weak state. Temperature 103·8°; pulse 117. When he coughed pus was evacuated from the wound. For the first few days the discharge was free, and the wound was dressed twice in the twenty-four hours, but it gradually lessened in quantity and became thin and serous. Before this a small bedsore had formed over the sacrum, and was treated with benzoin and a water cushion. On the 17th distinct grating was felt in the joint. On the 27th a counter-opening was needed near the posterior spine of the ilium. The patient continued very ill for several weeks, with hectic fever and rapid, feeble pulse, so much so that it was thought better not to operate. In January, however, displacement of the femur occurred, and on the 23rd he was anæsthetised. On cutting down in the usual position above and behind the trochanter, the head of the femur was found quite loose in the acetabulum, having been detached at the epiphysial line. It was removed, and the neck of the bone, which presented a ragged surface, was sawn off at its base, the great trochanter being spared. The acetabulum was perforated, whilst the adjacent surfaces of bone were denuded of periosteum, and were carious in parts, but they were not interfered with. The cavity was well irrigated and dusted with iodoform, and antiseptic dressings applied. The limb was ordered to be put up in an interrupted splint and the patient sent to bed. The wound discharged freely at first, and the condition of the patient was as critical as before operation. He was restless, slept badly, and had a dicrotous pulse almost too rapid to be counted. The appetite, however, was good. One or two abscesses formed in the neighbourhood of the wound, and after the evacuation of foul-smelling pus the patient began to mend. On Feb. 28th it was noted that the patient "was putting on flesh." The wounds were granulating healthily. The note on March 12th was: "Wound and sores healing rapidly; slight discharge can still be obtained from the lower sinus on pressing the abdomen. Temperature normal." The rest of the history relates steady progress towards complete recovery. In May the patient was up each day and in the garden, and the sinuses had quite closed. A Thomas's splint was put on. The limb was a little over two inches shorter than its fellow. He was soon afterwards discharged, but kept under observation. When shown to the Fellows of the Hunterian Society in January of the present year the patient was in excellent health, plump, and well nourished. He could stand and walk on the limb. Flexion and extension could be performed at the hip, and all the wounds and sinuses were soundly healed.

Remarks by Mr. RIVINGTON.—As excision of the hip-joint rarely gives the patient a very serviceable limb, and not infrequently leaves a maimed and shortened member, which in young subjects becomes relatively shorter and smaller as time goes on, it has always appeared to me to be an operation to be avoided, except in cases in which either the general or local condition of the patient can be improved by the removal of diseased tissues, by the consequent diminution of discharge, and earlier closure of wounds and sinuses. In my own practice such cases have been few. Classified in reference to treatment, four groups of cases have come under observation. The first group, which constitutes a large proportion of the cases of hip-joint disease admitted into the wards of the hospital, consists of cases of old disease, which ran its course with or without suppuration, and which has resulted in shortening and deformity, with fibrous ankylosis, the deformity being, as a rule, remediable by subcutaneous division of fascia and tendon, followed by extension in the deformed position. In a few weeks the deformity is removed. The second class consists of cases which run their course without the formation of abscesses, and which are successfully treated, especially in their early stage, either by weight or splint of some kind or other, with or without confinement to bed. The third class consists of cases in which abscesses form outside the joint, but do not communicate with it. For this class I have never practised excision. The fourth class consists of all cases of recent hip-joint disease in which abscesses communicating with the joint or sinuses leading to the joint exist. Many of these cases can be treated without excision, and with success. The exact local condition can be ascertained by examination with the finger when the abscesses are opened or through the sinuses. If the epiphysis is separated, it should be removed; and if there is necrosis or caries which is not likely to undergo spontaneous cure, excision should be practised. In a few of the worst cases amputation at the hip may be necessary. I do not think that we can expect a very low rate of mortality in these cases, whether operated on or left to nature, which Billroth says is a better physician than surgeon. The best prospect of success consists, I believe, in early exploration wherever suppuration exists, following the general principles of the antiseptic system. Whilst unable to concur in all Mr. Croft's maxims[1] or "formulæ," I quite agree with him as regards this fourth class of cases, that one cause of failure is operating too late in the progress of the case, and I believe we may sometimes save the life of a patient by a timely excision. My impression is that J—— would have succumbed if he had been left alone. Some remarkable results have recently been obtained by Mr. A. E. Barker by a new method of operation, which consists in the removal of diseased tissues with aseptic flushing of the part, and secures without drainage union of the wound by first intention by sutures and by the application of equable pressure. Mr. Barker has described his mode of procedure as "a useful technique in removing tubercular disease from the hip-joint."[2] It is perhaps too soon to express any decided opinion as to the general applicability of the plan, but, to use Mr. Barker's words, if surgeons can "achieve similar results in the future in cases of comparatively advanced morbus coxæ, it will be little short of a revolution." Separation of the upper epiphysis of the femur, to which Mr. R. W. Parker drew forcible attention in the interesting debate at the Clinical Society on Mr. Croft's series of excisions in 1879,[3] has occurred occasionally in my practice. It was present in the case which I have just related, and I will now add the notes of two other cases in which I operated and found this condition.

CASE 2. *Hip-joint disease after typhoid fever; separation of epiphysis; removal; recovery.*—Minnie L——, aged eleven years, was admitted on Feb. 12th, 1875. The patient had suffered from typhoid fever, and had been ill nearly three months. She was in a wretched condition. There were large bedsores over the sacrum and the trochanters. The thighs were flexed on the pelvis and the legs on the thighs. She was huddled up in bed, and unable to straighten the limbs. Weights were applied, but, owing to the supervention of œdema, had to be removed until her general health had improved. There was a sinus on the right side close to the trochanter, leading to bare bone. On May 31st, under chloroform, Mr. Rivington introduced his finger, and found the epiphysial head detached from the neck, and removed it. The patient made a good recovery.

CASE 3. *Simultaneous excision of both hip-joints; death from pyæmia.*—John H——, aged nine years, was admitted in March, 1875, under one of the physicians, and on the 28th of the month was transferred to Mr. Rivington's care. He said that he had been quite well five weeks before admission. He caught cold in the snow, and suffered from pain in the hip-joints and in the arms. The affection had been regarded as rheumatic. He was a very wasted boy, with slender skeleton, decayed teeth, luxuriant hair, and skin covered with sudamina. Both knees were drawn up on to the abdomen. The thighs were much wasted. Outside the left hip-joint was a large fluctuating swelling, and on the right side a discharging sinus existed near the trochanter. There were superficial bedsores over the sacrum and hips. Harsh breathing sounds could be heard over both lungs. The patient was in so precarious and enfeebled a condition that he was not expected to live many days, and it was deemed inexpedient to apply immediately either splint or weight. Pressure would have produced fresh sores and have occasioned additional irritation, and surgical interference seemed likely to hasten a fatal issue. On April 7th the abscess in the left groin was opened and half a pint of thick pus was evacuated. By careful nursing and attention to the general health the condition of the patient improved to some extent, but, the discharge of pus continuing abundant on both sides, and threatening to exhaust the patient, it was determined to explore both joints under chloroform, and remove any carious bone which might be found. The operation was performed on June 5th, with the concurrence and assistance of Mr. Tay and Mr. Reeves. On the right side the sinus running behind the great trochanter was enlarged upwards. The right lower extremity was inverted and shortened, and

[1] Clin. Soc. Trans., 1880.
[2] Brit. Med. Journ., Jan. 19th, 1889.
[3] Clin. Soc. Trans., 1880.

the head of the femur, denuded of cartilage, was found lying behind the acetabulum. The head of the femur only was removed; the acetabulum did not require interference. On the left side a sinus below the great trochanter leading upwards was laid open. The epiphysis of the head of the bone was found detached, and was removed. The femur was sawn through the great trochanter. The acetabulum was not carious. The wounds were dressed with lint soaked in carbolic oil and cotton wool, and a box-splint was applied. The patient went on as favourably as could have been anticipated for nearly a week. On the 13th, eight days after the operation, a large fluctuating swelling, which had rapidly formed in the right axilla, was opened, and a considerable quantity of pus was evacuated. The patient had no rigors, but diarrhœa supervened, solid food was refused, and death took place four days later. The post-mortem showed pyæmic pneumonia in both lungs.

Remarks by Mr. RIVINGTON.—These were the pre-Listerian days at the London Hospital, but I am by no means convinced that even if the complete details of the Listerian system could have been applied, a successful issue would have resulted under conditions so unfavourable. The object of the operation was to give the patient a better chance of recovery by the removal of diseased bone which was keeping up an exhausting drain on the system, and the excisions certainly diminished the amount of suppuration. Although I have had under my charge numerous cases of hip-joint disease, and have explored frequently when abscesses and sinuses have existed, I consider my experience too limited to justify any conclusion as to the relative frequency of separation of the epiphysis. I believe that it occurs sometimes in cases of hip-joint disease unaccompanied by abscess, and is the cause of shortening and deformity. In his work on "Rest and Pain," Mr. Hilton relates one or two cases of displacement from disease in which it seems probable that separation of the epiphysis had occurred, and which he readily reduced. One other remark. In works on Surgery, the displacement which results from caries and ulceration of the acetabulum and head of the femur is sometimes loosely described as dislocation or displacement on to the dorsum ilii. My impression is that actual displacement on to the dorsum ilii is very rare, only occurring in acute cases in which the capsular ligament is softened and gives way before any loss of substance of the head of the femur has occurred. One such case of true dislocation on to the dorsum reduced more than a month after the occurrence I recorded in the THE LANCET of Sept. 21st, 1878. Without speaking in any wise dogmatically, the ordinary displacement in hip-joint disease seems to me to take place directly backwards, the remains of the head or neck of the femur coming in contact with the square-shaped surface of the ischium immediately behind the acetabulum. At all events, that is the position occupied in some museum specimens which I have examined. Flexion of the hip-joint, the ordinary posture assumed in hip-joint disease when the patient is not under treatment, evidently favours the retirement of the bone when displacement occurs to a lower position than the dorsum ilii.

HULL ROYAL INFIRMARY.

SURGICAL EMHPYSEMA WITHOUT WOUND OF LUNG.

(Under the care of Mr. CRAVEN.)

WHEN emphysema of the subcutaneous tissue of the body occurs without a history of injury to the trunk or severe strain, and without evidence of lung disease, the diagnosis as to causation must remain very doubtful. This is illustrated by a case which was under the care of Mr. W. H. Pearce in 1886.[1] A man was admitted with emphysema of the face and neck of a day's duration, urgent dyspnœa was present, and he died three hours and a half after admission. At the post-mortem examination, it was found that an abscess cavity in the posterior mediastinum communicated with both œsophagus and stomach, and that air (and gas) had made its way upwards in the cellular tissue of the posterior mediastinum to the neck, where it had passed to the subcutaneous tissue of that region. Occasionally emphysema at the root of the neck appears to be secondary to rupture of air vesicles at the upper part of the lung, the pleura having also been ruptured; but its appearance in that situation more often indicates the giving way of air vesicles at the root of the lung. Other cases, to which reference may be made, are the following: emphysema after labour;[2] from rupture of a vomica;[3] and following aspiration of the chest for pleurisy.[4] For the notes of this case we are indebted to Mr. Frank Savery, house-surgeon.

Emily S——, aged twenty-nine, was admitted on April 1st, 1889, to the Royal Infirmary. The patient had an abscess on the left side of the lower jaw for about two months. There was now considerable swelling of the left side of the lower jaw, but no fluctuation could be made out. She had a number of decayed teeth and stumps which pained her a good deal. On April 5th, at 10.30 A.M., chloroform was administered. As the patient was being got under, it was noticed that the right lower eyelid was swollen, but no importance was attached to this at the time. All the bad teeth and stumps were extracted without any difficulty. On getting the patient back to bed swelling of the right side of the face and of the neck was noticed, and this was then found to be due to surgical emphysema. At 7 P.M. the emphysema involved the right side of the face, but there was none whatever on the left where the abscess was. Both sides of the neck, back, and front were affected; both shoulders and the chest, as far down as the seventh rib. She complained of pain on the left side of the chest near the lower end of the sternum, and in the lower part of the neck. She was quite unable to swallow even liquids, but had no difficulty in respiration.

April 6th.—The emphysema is less on the face, but about the same elsewhere, and she can swallow liquids with considerable difficulty. Temperature normal. Pulse 128. The lungs were examined, but nothing abnormal could be detected. The ribs were also carefully examined, but no localised pain or fracture was found.

7th.—Emphysema much less; patient is able to swallow liquids. The face looks almost well again, but there is still a good deal of swelling about the neck; in the chest it extends to the third rib.

8th.—Patient can swallow easily.

12th.—The emphysema of the neck is absorbed to a great extent; patient can swallow well.

17th.—Patient discharged; there is still a little emphysema at upper part of chest, but none in the neck.

Remarks.—This appears to be one of those rare cases in which the air cells near the root of the lung rupture, the air passing into the posterior and then the superior mediastinum to the root of the neck, and thence to face, chest, and shoulders.

[1] THE LANCET, vol. ii., p. 1221.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Comparison of Salicine with Salicylate of Sodium.

AN ordinary meeting of this Society was held on April 22nd, the President, Mr. Timothy Holmes, in the chair.

Dr. HAIG read a paper on Salicine compared with Salicylate of Sodium, as to its effect on the excretion of uric acid and its value in acute rheumatism. He added some deductions as to the causation of the disease. He said that salicine was generally considered to be of less value than a salicylate in acute rheumatism. He quoted his experiments as to the relative power of these drugs in producing a *plus* excretion of uric acid, which showed that, dose for dose, salicylate of soda had about thirteen times the excretive power of salicine, and that salol was weaker than a salicylate, but more powerful than salicine; their action in disease appeared to correspond roughly with their action on uric acid excretion. Salicine gave a much less marked reaction with perchloride of iron in the urine than an equal dose of a salicylate. He quoted cases showing the inferiority of the former in the treatment of acute rheumatism. He referred to his previous paper on salicylates in the Transactions of the Society, and the deductions then made as to the causation of acute rheumatism, and he now brought forward further evidence. He alluded to the action of drugs and diet in acute rheu-

[2] Ibid., vol. ii., 1885, p. 260. [3] Ibid., vol. ii., 1889, p. 1277 (Dr. Shelswell).
[4] Ibid., vol. i., 1889, p. 273 (Dr. Julian Evans).

matism, to Dr. Hilton Fagge's comparative tables, to the effects of meat, exercise, cold, and damp. He considered the treatment of this disease by alkalies; their action as regards uric acid was similar to, but less powerful than, that of salicylates, and their effects in disease corresponded with this. Treatment by acids and substances which raised the acidity, such as ammonia, caused retention of uric acid and did harm. The action of ammonia as an acid explained its value in the uric acid headache (migraine). He dwelt on the natural cure of rheumatic fever, on the way in which rest and milk diet affect the excretions, and on the excretion of acid from the skin. He mentioned the observation of Sir A. Garrod that suppressed perspiration was immediately followed by an increase of urinary acidity, and he stated that increased perspiration was also immediately followed by a decrease of urinary acidity. He dealt also with the reaction of perspiration under various conditions, and with the influence of increased skin activity in lowering the acidity of the urine, which could be easily demonstrated. He said that all methods of treatment that were of any value in acute rheumatism caused a *plus* excretion of uric acid, and salicine and the salicylates were useful in this disease in exact proportion to their power of producing elimination of this substance. He asked if acute rheumatism were due to uric acid; he gave reasons for thinking that the joint symptoms were due to it, and he considered objections against this view. He pointed out the differences between gout and rheumatism, which he said were partly due to the difference in the metabolic processes of young and old. Sir A. Garrod said that there was an absence of uric acid from the blood in acute rheumatism, and he had suggested that inflammation destroyed uric acid. The writer believed that the uric acid was all driven out of the blood by high acidity and precipitated in the joints, and that such precipitation and not destruction of uric acid explained Sir A. Garrod's observation with regard to the effect of inflammation and the fever of rheumatism. He remarked on the effect of fever and inflammation on the reaction of the blood and tissue fluids and the urine. The temperature was higher, and therefore the rise of acidity was greater, and the precipitation of uric acid in the joints more complete in rheumatism than in gout. Other causes that raised the acidity were chill and suppressed perspiration, the ingestion of acids and acid-forming foods, and the formation of acids in dyspepsia &c. He pointed out the effects of tonsillitis or local inflammation, and of bacteria or drainage emanations, in producing fever and raising acidity, and alluded to the excretion of uric acid in acute rheumatism. A high arterial tension at the end of an attack pointed to excess of uric acid in the blood; anything that raised the acidity at this time would cause a relapse. He finished with certain conclusions as to the causation of the joint symptoms of acute rheumatism by uric acid.

Dr. NORMAN MOORE said that when acute rheumatism and gout were looked at from the anatomical point of view they appeared totally distinct. In gout there was invariably a morbid change in the joints, whereas after rheumatism these latter were found to be natural. The rheumatic change was a transient one, and left no permanent alteration. In gout there might be some slight change in the endocardium, but in quite three-fourths of the bodies of people who had uric acid in their joints the endocardium was entirely free from change. As a rule, there were also extreme clinical differences between these diseases, but sometimes cases arose which supported the view that they were allied. He quoted the case of a man aged thirty-five, a carpenter, who had acute rheumatism with involvement of the joints and a mitral murmur, and who one morning had an attack of gout in his great toe; and after that the case assumed the aspect of gout. He could also refer to a second case of gout which began as acute rheumatism. The term rheumatic fever, he thought, really covered several distinct pathological conditions. Some cases were nearly allied to gout, while others were nearer a septic disease, like ulcerative endocarditis, and this, he thought, explained why some cases only of acute rheumatism developed endocarditis.

Dr. A. GARROD said that Dr. Haig had so built up theory on theory that it was necessary to seek out the facts he had established. He had shown that uric acid might be excreted in excess unaccompanied by an excessive excretion of urea, and he had found that salicylates aided the excretion of uric acid; but he asked what evidence there was that uric acid got into the joints in acute rheumatism. If Dr. Haig were right, there must be a time when the blood was loaded with uric acid which the salicylates had swept out of the joints towards the kidneys. But had this excess been found in the blood? If the diseases were identical, it was curious that salicylates could not be compared with colchicum in the treatment of gout, and colchicum was useless in acute rheumatism. Antipyrin had been lauded as equal, if not superior, to salicylates in the treatment of rheumatism; but if this were true, it went directly against Dr. Haig's deductions; and the same applied to benzoates. Some young people suffered from gout, and their gout was not more like rheumatism than the gout of older people. He did not think that diet had anything to do with the cause of rheumatism. A great deal of the so-called rheumatism which followed fevers was not true rheumatism at all. He regarded tonsillitis as a manifestation of the rheumatism itself, and he held that no theory of its causation was perfect which dealt only with the articular manifestations of that disease.

Sir WILLIAM ROBERTS said that the author seemed to regard uric acid as a sort of essentially poisonous substance, but he was not aware that there was any proof that it possessed any such properties, for it might be harmlessly given to animals mixed with their food or injected into their blood. The experiments of Ebstein, founded on the injection of uric acid with phosphate of sodium into the cornea, he could not regard with any confidence. Trustworthy evidence, on the contrary, was in favour of the fact that uric acid was harmless except when precipitated in the free state, and in the blood it did not give trouble unless precipitated in the form of biurate of sodium, which was extremely insoluble. The relation of gout to rheumatism was scarcely worth discussion until some similarity between them was found as to the condition of uric acid in the blood and joints.

Dr. LAUDER BRUNTON said that the discussion of the relation between gout and rheumatism was one of great difficulty. There was an old idea that rheumatism was due to the presence of an excess of lactic acid, and acids, such as phosphoric, had been injected into the blood and had produced endocarditis. It was possible that in the production of rheumatism we might have the formation of an acid connected with the growth of a micro-organism in the blood; thus the fever might be due to the micro-organisms, and the gouty symptoms to the acid. Some years ago when travelling in the Riviera he suffered from lumbago, which he found to be due to drinking red wines, and he said that even good wines were much more acid than people were aware of, and this explained why they caused pains in the joints and in the muscles. The substance formed might not be uric acid, but some substance nearly allied to it, which was excreted in the form of uric acid.

Dr. HAIG, in reply, held that the differences between gout and rheumatism were more apparent than real. Necropsies in cases of acute rheumatism were rare, and the patient was usually rid of his joint trouble at the time of death. Post mortem the urates were usually found removed from the joints in gouty people, and this was because during the last illness there had been a *plus* excretion of uric acid, and that excessive excretion must have come either from the joints or the viscera. Rheumatic fever was an acute trouble in which the uric acid in the joints was probably not precipitated, but in solution. There were facts which seemed to show that the endocardial trouble was due to uric acid, and that was the foundation of the practice of getting the patient under the influence of alkali as soon as possible, so as to save the heart. The alkali was not an antiseptic, and rheumatism could be cured by plain arrowroot or gruel, and this surely would not be so if a microbe caused the disease. There was an enormous excretion of uric acid in cases of enlarged spleen, and quinine, by contracting the spleen, would cause a considerable *plus* excretion of uric acid. Anything which raised the uric acid excretion raised the arterial tension. Several authors believed that diet had as much effect in rheumatism as in gout. As to the idea that uric acid was a poison, he had no certain evidence that it was so; but his ideas were inferences from results. He had found that certain troubles, such as bad headaches, were accompanied by a high tension pulse and a *plus* excretion of uric acid; probably this latter was only one visible body out of a large number, all acting in the same way.

MEDICAL SOCIETY OF LONDON.

Continuation of the Debate on the Present Position of Abdominal Surgery.

AN ordinary meeting of this Society was held on April 21st, the President, Mr. Knowsley Thornton, in the chair.

Mr. LAWSON TAIT, in reopening the debate, first of all thanked the authorities of the Society for their kindness in permitting him to take part by invitation in a discussion so full of interest. He congratulated the President on his distinguished position at the head of so ancient and so honourable a Society, and he had to state his opinion that the Society had done well in the selection of Mr. Meredith for the initiation and guidance of the debate, for that he had done in a manner at once judicious and judicial, and so completely as to leave little to be said. Indeed, he found it hard to manufacture contentious matter out of Mr. Meredith's paper, and no words of his could adequately acknowledge the constant and kindly reference made to his own work. All this sounded as if the charges so freely laid at the doors of abdominal surgeons, that they were unnecessarily combative, could no longer be sustained. It looked as if the tomahawks which gleamed so brightly and were used so freely some ten years ago were rusty and blunt and might be buried. He hoped and believed it might be so. The great subject of contention used to be the so-called antiseptic system, and Mr. Meredith's opening sentences so completely accepted his own position on that mattter that he had really little more to say. Mr. Meredith, however, expressed an opinion that it was to Listerism that we owed our modern system of excessive cleanliness, but he trusted to be forgiven when he pointed out that the exact opposite was the fact. It was the opponents of Listerism who showed that it was cleanliness that was wanted, and not germicides; that it was the soil that we had to fear, and not the seed. The weeds would not grow when the garden was kept in order, and it was to the preaching of Simpson and his school, and not to that of Lister, that our advances in this respect were due. These views led him into the plan of flushing the abdomen, and he cared not how many little beasts there were in the water so long as he got the dirt out. The logical conclusion of Listerism, indeed, was, and is, that dirt could not matter. It was like the Calvinistic doctrine of predestination; sin, neither original nor acquired, could be of the slightest consequence so long as we were played upon by the spray of special election. This was enunciated clearly by Lister's followers, who declared in debate that they went to the operating-room from the dissecting-room and post-mortem table with light hearts; but we find that they went back to the same tables with the same patients—dead. Now that the system was no longer used as a cover for an ignominious retreat, he watched its varying and disappearing phases with amused curiosity, but no longer with interest. Practically it was as dead as Julius Cæsar, and when he heard Mr. Mayo Robson say that he let a spray play loose in the room, he thought that there was only one other thing to do, and that was to imitate the methods shown by a full-page drawing in Sir Spencer Wells's book of letting it play out of the window. One other criticism he had to offer upon Mr. Meredith's paper, and that was a further protest against the American barbarism of the word "laparotomy." He need not tell a room full of classical scholars that "laparotomy" could only mean a lumbar incision and nothing else. It could not possibly be applied as we applied the phrase "abdominal section." Concerning the removal of the appendages for myoma, he was glad to find that Mr. Meredith pronounced it to be a difficult operation, one which, indeed, could not often be completed. In a book recently published by Dr. Thomas Keith and his son Dr. Skene Keith, entitled "Treatment of Uterine Tumours by Electricity," it was said that this was an operation requiring no surgical skill. Mr. Meredith seemed to cling to the ovular theory of menstruation and to attribute the failure in cases of removal of the appendages in accomplishing the objects desired to incomplete removal of the ovaries. In the second volume of the book, the first volume of which had been so freely used with gracious acknowledgment by Mr. Meredith in the construction of his paper, he should adduce evidence which would for ever settle this question; but he wished to ask him now to consider what he wanted us to believe. It was to the effect that a minute percentage, perhaps not in bulk one per cent. of an organ not removed but still probably destroyed by strangulation, could be sufficient to carry on the most conspicuous function of that organ. Besides, the observations of Bland Sutton and Arthur Johnstone must not be brushed aside in this way. Those who still maintained the ovular theory of menstruation must read those papers, and they must answer them. He was delighted to find that Mr. Mayo Robson and Mr. Meredith entirely confirmed his views concerning removal of the uterine appendages, views which he had been proclaiming from the housetop for fifteen years, and which had been listened to without misrepresentation only within the last five years. The nearer we approached to Battey's principle in operating upon any case, the more unsatisfactory would be the result. The nearer we approached to his own principle in operating for gross and palpable disease, the more our patients would be benefited. Concerning the ultimate results of these cases, he had published a large amount of evidence, and was prepared with much more, but the difficulties were great—difficulties which did not exist in any other department of our art. It was an easy matter to show a bad knee-joint before a Medical Society previously to an operation for excision, and in a few months the patient could again be exhibited to show the results. But with pelvic suffering in women no such exhibitions could be made, and the patients often absolutely prohibited all publication of their cases. Mr. Meredith made a slight allusion to the defective proof that cases of intra-peritoneal hæmorrhage published as originating from ruptured Fallopian tubes the seat of pregnancies were really such. This was a curious fallacy which was being handed round from critic to critic, just as the statements of text-books were handed down from one to another without examination, as, for instance, concerning the ovular theory of menstruation. Speaking for himself as the publisher of the largest number of such cases, he had to say that in every case the proof was complete, and remained so. First of all, tying of the broad ligaments stopped the hæmorrhage in every case, and there was no other known cause of rupture of the Fallopian tube leading to severe or fatal hæmorrhage excepting its rupture by an ectopic pregnancy; finally, the productions of pregnancy—that is to say, placental villi—in the meshes of the muscular structures of the walls of the tube could always be, and in his cases had always been, found. Whether the fœtus was found or not was not a matter of the slightest consequence. This was about the twentieth time that he had had to publish this answer, and he had no hope that it would be the last. Out of Mr. Mayo Robson's speech came a point hardly pertinent to Mr. Meredith's paper, but of such interest that he could not pass it over. It was the vexed question as to whether abdominal surgery should be done by general surgeons in general or in special hospitals or not. Some years ago Mr. W. Thompson of Dublin did three consecutive ovariotomies successfully, and he made that fact the text upon which to preach the speaker a lesson for saying what he never did say, that general surgeons should not do abdominal operations; and he could not help thinking that Mr. Robson had him also in his argumentative eye; but why should not his critics take the trouble to read what he said before they attacked him? What he did say was that abdominal operations would be more successfully done by men who devoted themselves entirely to them than by men who took them up casually. Mr. Robson presented a splendid list of cases rivalling those of any living surgeon, and outstripping many; but that proved nothing to the point. It proved conclusively that Mr. Mayo Robson was a most successful surgeon, and it was certainly suggestive that he would make a most successful specialist; but it did not prove that any general surgeon was warranted in boggling about in the abdomen if there was a chance that his patient could be put in the hands of a specialist. Mr. Syme laid it down as the first maxim in the practice of surgery that all interest must be subservient to the advance of our art. Could Mr. Meredith's paper on "The Present Position of Abdominal Surgery" ever have been written and illustrated by the names he had quoted if men had not given themselves exclusively up to the work of abdominal surgery? As long as ovariotomy received brief and generally condemnatory remarks in the text-books of

surgery the bar of all progress was effectual. When it became the work of special men and the subject of special works the progress was vast and lightning-like in its rapidity. Neither dentistry nor ophthalmic surgery, nor laryngology, nor obstetrics could ever have attained their present high state of development but for the devotion and success of special men. The first step in the development of specialism was the creation of the College of Physicians, the next the Charter of the Barber Surgeons, and the third the creation of the Apothecaries' Company. Finally, the creation of special societies—in every instance at first opposed, and then fully commended—had shown how advance had been and could be made, and to argue against specialism was to argue against the wind; and, finally, who had heard of an experienced physician, or surgeon, or general practitioner having a wife, a sister, or a mother with an ovarian tumour who took her to Erichsen, or Paget, or Prescott Hewett in preference to Spencer Wells? and he found the same selective practice held good in this, the next generation. Mr. Treves, surgeon to the London Hospital, Lecturer on Anatomy to that medical school, and author of a book on "Intestinal Obstruction" took a similar view though from another standpoint. Mr. Treves' personal appearance was so attractive, and his voice so pleasing, that almost all he said might pass as convincing but for after-thought; and therefore it was that he ventured diffidently to say that he thought it would be difficult for any man to crowd more fallacies into any other ten minutes than those during which he addressed the meeting. To him a peritonitis was but an abscess in the buttock or in the back, and a hysterectomy but as a circular amputation of the thigh. *Sancta simplicitas!* But it was charming to think of, and he wished it were true; but there was no truth in it, save concerning the two abscesses, that a cavity contained pus, and there was pus in a cavity. It was long since he dissected the abdomen, and he might have forgotten all about its anatomy, but when he opened that cavity in peritonitis he found that inexplicable nuisance the omentum still there, hampering every movement, and he found adherent intestines softened and apt to tear, so that when his patient died, and there was a post-mortem, he found that there were numerous loculi of pus that neither sponges nor washing could remove. He knew of no abscess in the buttock or in the back that presented any such or similar complications. As a matter of fact, in whatever the pathological principles involved in general surgery and in the surgery of the abdomen might be identical, in all the essential details of the operations involved for treatment of the abdomen a singularly specialised field was laid before us. In his lecture on Anatomy, Mr. Treves might with safety lay down anatomical guides for tying a main artery or for cutting for stone, and these rules would not be deviated from in any material detail once perhaps in a hundred times. But when the speaker proceeded to cut out large tumours, especially solid ones, from the abdomen, in a very impressive percentage of his cases he found no landmarks from beginning to end. Sometimes when he had finished an operation he did not know what he had done, and it might be only microscopic investigation of a cyst wall that revealed the fact that he had removed a distended kidney when he thought he was working at an embedded cyst of the broad ligament. Over and over again he had told the stories of huge tumours removed successfully, the origin and nature of which were still unknown, and of cases unsuccessful, where careful post-mortem examination had left the whole matter still in doubt. He knew of no such surgical experience outside the abdomen. In all other regions the surgeon began his work with a relatively very small chance against him of important error in diagnosis, but in the abdomen we had against us a chance of at least 20 per cent. of total mistake, and such an absence or want of accurate knowledge of detailed relations as amounted almost to complete ignorance; so that Mr. Treves' anatomical guides were absolutely useless, save concerning the most elementary details. When Mr. Treves amputated the thigh, he had no doubt found the relation of parts practically identical in all his cases. He could choose and determine the length and character of his flaps, and he knew exactly what vessels would bleed and where they would be found. He said his experience had been identical with amputation of the uterus for myoma; that he had made flaps, tied vessels, fastened the flaps together, and dropped the stump back into the abdomen with good results. This only meant that his experience had been small and his fate exceptionally happy. His method was not new. We had had all this over and over again any time these fifteen years. It was the "stage" method of Schroeder, and even in his hands had a mortality of 30 per cent.; and all of us had tried it with most disastrous results. If Mr. Treves persevered in it long enough, he would find that the Valley of the Shadow of Death would be the lot of his patients. A uterine stump from which a myoma had been removed was unlike anything else in the human body known to him. It was as hard as cartilage and as brittle as cheese, so that a ligature would cut through it, or it was so completely infiltrated with serum that a tightened ligature would be quite loose in a few hours, and the vessel would bleed even at the end of forty-eight hours. After he had screwed up a Koeberlé's clamp as tight as he could screw it, he had seen bleeding recur from the stump forty-eight hours after. In some of the cases with specially œdematous pedicles the compression of the stump had to be followed by renewed tightening hour after hour for two or three days after the operation. In such stumps large vessels shrank back in the tissue and did not bleed at the time of the operation; others, which did bleed at first and were secured, would become loose; and others would play pranks of such fashion as were quite unknown in the general run of surgery. We all knew that if we could secure the vessels in our stumps effectually and then drop the stump back in the abdomen, we should have at once, in all probability, a 5 or 6 per cent. mortality for these dreadful operations. The only alternative that we had was the extra-peritoneal treatment of the pedicle, and it could not be without the best of all reasons that the men who had the largest experience in this operation had universally, without, so far as he knew, a single exception, arrived at the conclusion that this was the safest and best method. The best implement by far for carrying it out was Koeberlé's serre-nœud, and for Mr. Treves to call the extra-peritoneal method of treating the uterine pedicle with this instrument a barbarous method was simply to place himself in a position where he could be answered only by ridicule. A few words about the treatment of ectopic pregnancy. He had never seen any subject brought under professional discussion into which so much unnecessary confusion had been brought as in this case, and the confusion was largely due to the want of care which many of those who took part in the discussion exercised in reading what had been said on the subject. To those who were familiar with its literature it must be perfectly clear that the suggestion made by the President that we should furnish data for forming an early diagnosis of ectopic gestation referred to the period previous to rupture; diagnosis after that was easy enough in the great majority of cases. Concerning his own utterances upon the subject, he had been misrepresented over and over again. He had not said that it was impossible to diagnose it, but what he had said was that the patients did not come to us for diagnosis, owing to the absence of symptoms, till the rupture took place. In his remarks Dr. J. W. Taylor stated that he had two cases in which he had been able to make the diagnosis previous to operation, but that was after rupture. As Mr. Taylor's colleague in hospital work and in the societies where most of his observations were placed on record, he was familiar enough with what he had seen of ectopic gestation, but he had yet to learn that he had experienced two cases in which a diagnosis was made before the period of rupture, and if he had had this experience it would be an advantage to all concerned if he would place the facts with sufficient authentification upon record. Similarly, Mr. Treves had clearly fallen into error in talking of the removal of the placenta and the sac in cases which had gone on developing after the period of rupture up to the death of the fœtus, which might be at any time before the ninth month. If the fœtus had been dead for some time, as it generally had in such cases, before the operation was done, from a year or eighteen months up to an indefinite period, there could be little difficulty or trouble in removing the placenta, and he should say very little risk; but what we wanted to settle was not that, it was what was to be done with the placenta in the case of a living child. At the fourth month he removed the placenta and arrested the hæmorrhage by perchloride of iron, but he had such an experience of the operation that he should hesitate to attack the placenta of a living child very much older than that. Mr. Treves was again in error when he recommended the removal of the sac in such cases, and particu-

larly and clearly enough when he said he had himself accomplished it. What Mr. Treves had done, of course, was to remove the fœtal membranes; the sac was the broad ligament which Mr. Treves would never think of removing, and he ventured to say he could not have removed if he had thought of doing so. If Mr. Treves differed from him in the belief that the sac was the broad ligament, then he asked him to produce any post-mortem specimen from any museum in this country in which the sac would not be found to be constituted of the remains of the distended Fallopian tube and the broad ligament; in fact, any specimen in which it would not be proved that the sub-peritoneal development of an ectopic gestation from the period of primary rupture up to the death or removal of the fœtus did not take place between the folds and below the folds of the broad ligament. He had examined all the cases that had been available during the last twelve years, and he had failed to find any case which did not come within his category. The supposed exceptions had proved to be cornual pregnancies, which were not ectopic.

Mr. GREIG SMITH of Bristol said that the enormous area covered by the discussion rendered it impossible that the speakers should meet at many points. He thought that there was at present too much seeking for a uniformity of method, too urgent a desire for bringing details of practice down to a rule of thumb. He held very strongly that the best results would be got from a judicious selection from all good methods. There was no doubt that in hysterectomy for fibroids the intra-peritoneal method of treatment of the stump was the operation of election; but undoubtedly the worst cases—those most completely justifying removal—could not be treated in this way. No doubt we all aimed at devascularisation of the pedicle; and if we could get the cervix completely free of true muscular tissue, well free of ureters and bladder, and if the severed uterine canal could be covered with peritoneum, then we might safely treat the stump intraperitoneally. Mr. Treves called the wire clamp a relic of barbarism, a tradition of the Middle Ages. If it were so (and he was afraid it was not, for their methods of inducing necrosis in those days were not so gentle), that would be one argument in favour of his adopting it, for abdominal surgery was more perfect three hundred years ago than it was in the memory of surgeons now living; they at least knew the value of abdominal drainage and irrigation. With regard to these (and under the same head he would include sponging and the use of saline purges), there was danger of our running to extremes. Flushing was very rarely necessary, and after it had been employed it was not necessary to remove all the fluid, which would soon come away through the drainage-tube. Abdominal distension and vomiting were as often caused by obstruction as by peritonitis, and he had great faith in the use of saline purges in suitable cases; if they did nothing more, they carried off enormous volumes of gas and fermenting fluids. Another example of extremism was the mode of treating what Mr. Tait had called impacted labours. He was one of those who regarded Porro's operation as a gross sort of surgery, justified only by the grand motive of saving life. He admitted that it was easier to perform than Cæsarean section, though that was no argument with a trained surgeon; it might also commend itself to the unaided surgeon in an emergency, but it never ought, in his opinion, to be the operation of election. At present the mortality of the new Cæsarean operation was better than that of Porro's, and that fact alone should guide our first choice. If from any causes, the most important of which were hæmorrhage and want of uterine contraction, we thought the Cæsarean would fail, we might then finish with Porro's operation; the two ought to be made supplemental to each other and not exclusive. His experience of the after-history of cases of oöphorectomy on the whole was favourable, but he had seen some most disappointing results. As to the ultimate good results of mere drainage in suppurative lesions of the kidney he was somewhat sceptical; in scrofulous kidney it was useless, and radical removal should be adopted. In other suppurative lesions the effect of drainage was undoubtedly to diminish size and lessen vascularity; but these advantages were probably more than counterbalanced by the increased density of peri-renal adhesions, which were difficult to separate when nephrectomy was demanded. In peri-renal abscess, with the patient very ill, drainage ought always to be carried out. While he admitted with gratitude the help derived from abdominal surgeons, he thought that the general surgeon daily dealing with many tissues and using a variety of instruments could teach his specialist *confrère* a few lessons worth learning in dexterity of manipulation and fertility of resource. He pleaded for greater thoroughness, exhaustiveness, and precision in presenting to others the lessons that experience had taught us. The material required to be more thoroughly elaborated, the results of experience and study more logically presented, and he would like to see our literary and scientific work placed on a higher level.

Dr. ELDER of Nottingham desired to refer to the methods by which the present successes in abdominal surgery had been arrived at. The revolution brought about by the adoption of the antiseptic system of treatment had had a large share in the production of the good results. There was certainly one common point of agreement, the absolute necessity of the most perfect surgical cleanliness. The abdominal region shared in the solidarity of the body, and the same surgical laws ruled there as elsewhere. There was still one other factor—a personal one. In a large proportion of cases the nature of the disease could only be guessed at, and the capability of doing this constituted the main reason why one operator gave results better than another. The educating influence of personal experience could not be neglected, and, other things being equal, the work of specialists and of special hospitals must attain to a greater success than the work of general surgeons. At the hospital to which he was attached antiseptics were not used at the time of the operation, but every care was taken to get perfect cleanliness. Out of the last forty ovariotomies that had been performed there had been two deaths. With regard to after-treatment, were it not for the occasional resort to rectal feeding by means of suppositories the treatment might be described as one of masterly inactivity. He believed with Mr. Treves that the use of the clamp was barbarous; it was tedious in its effect, it was a source of danger to the patient and of anxiety to the surgeon, and he felt sure that before long it would be relegated to the limbo of antiquity and the more modern intra-peritoneal method adopted. In cases of disease of the uterine appendages it was difficult to advise as to treatment when the subjective symptoms were out of all proportion to the objective signs. A growing experience had taught him that diseased conditions might be present which might embitter life or threaten it directly with premature extinction, and yet the physical signs were relatively insignificant. He related a case of ovarian abscess which could not be felt by bimanual palpation, yet the history went far to determine the exact nature of it. The performance of earlier operation would bring about a lower mortality and greater benefit to the patient. Including all forms of inflammatory pelvic trouble, there had been thirty-six of these operations at his hospital without a death.

Dr. MALINS of Birmingham limited himself to speak of one or two subjects most familiar to him as the outcome of his own practice and observation. He first called attention more especially to the removal of the ovaries and tubes for inflammatory conditions. In the whole range of operative measures by abdominal section he was of opinion that this was the most unsatisfactory, and that by no means rarely its performance was one of questionable utility. The President had alluded to the desirability of obtaining information as to the after-history of the patients who had undergone this operation; it was a needful want. It was to be regretted that definite knowledge on this interesting sequel was not forthcoming to a sufficient extent for statistical purposes, but he had records of a number of such where the patients had been traced, and knowledge of others where the accounts had certainly been unfavourable. But he had more cogent testimony to the proof in the fact of a number of instances where the operation had been performed and where the patients had subsequently recovered without the aid of such measures. What were the objections to the operation in this and allied subjective conditions? Foremost there was the difficulty in diagnosis from physical signs in recognising many inflammatory conditions in the pelvis and their differentiation. It was well known that the symptoms, of which pain was a prominent one, were frequently out of all proportion to the extent of the disease found. Everyone who had had occasion to open the abdomen often would have been struck with the force of this observation. Then the length of time often required for recovery after abdominal section for this purpose, at times years being necessary, destroyed confidence in the efficacy of the operation as such, and left to the lapse of time the assumed credit

of cure. Again, there was a mortality attached to it which, looking at many cases of this kind as operations of simple election, not of expediency, still less of necessity, ought to exercise some weight in the determination. Put it as low as possible—5, 4, 3, or even 2 per cent.—still it was an element which ought to be estimated in the conduct of the case. There was a marked want of clear pathological lines upon which our knowledge of disease of the ovaries and tubes was founded, and still more of the correlation of this with clinical knowledge, in order to form a guide in justifying or condemning their removal. Further, it was by no means an uncommon result that serious domestic infelicity arose, and that cruelty, desertion, and separation ensued. Three cases with this sequence came under his notice within a short space of time a few months ago, and doubtless more could be found. It might be said that sexual troubles were associated beforehand with this condition. This was true; but when the anticipated success by removal of the ovaries and tubes had not been realised the position was intensified, and the last state of the patient was worse than the first. The patient's after-history in many such cases was not hard to discover or obscure to interpretation. It was one of ever conscious mental regret, of physical imperfection, and social disability. Mr. Meredith alluded to suppurative conditions as forming a share of the grounds for performing this operation. This was so, and the presence of pus in the pelvis must always be a warrant for its removal. Even in these cases it was remarkable at times how induration and thickening melted away, nor did he think that they were necessarily associated with dilated and pus-containing tubes. The natural tendency of hæmatocele was to cure, as Mr. Jonathan Hutchinson pointed out very forcibly many years ago. He had yet to learn that the early recourse to abdominal section in the majority of such cases afforded the best chance of recovery. He spoke from an experience of thirty cases of hæmatocele of which he had notes; in those where suppuration was evident he had not hesitated to open and drain the containing parts. Another question of considerable moment to obstetricians was the opening of the abdomen and washing out in cases of puerperal peritonitis. He had known five cases in which this had been done, and all the patients had died. There was a class of cases where a combination of high temperature, quick pulse, rapid breathing, abdominal distension, and sickness, early developed, appeared to render recovery hopeless from the first, in spite of all our efforts; experience would probably teach us where washing out could be done with a possibility of good, but the condition of the patient soon after childbirth under these circumstances seemed to afford faint foundation for the success of operative aids. We must concede the real value of the progress made in abdominal surgery, we could not fail to appreciate its merits; but there was a danger at times lest our enthusiasm should overpower our judgment in the frequency of abdominal sections, and particularly in those where the removal of the ovaries and tubes was the operation performed.

Mr. REEVES thought that Lister had never clearly enunciated that the secret of his system was cleanliness; he said rather that germicides were essential. He himself did not use antiseptics, though he did not object to their being employed in his cases. He justified the use of opium, which at the very least would tide the patient over the first night. In the treatment of false peritonitis, instead of employing opium or purgatives he passed a long tube up the rectum as high as it would go; if this did not relieve, he followed it by a dose of Epsom salts. He believed also in the old-fashioned method of applying turpentine stupes to the abdomen. He was under the impression that flushing the abdomen with a ½ or 1 per cent. saline solution would restore the pulse after hæmorrhage; his small experience in this direction was certainly in its favour. He hoped that because Mr. Treves had had two successful cases which were favourable to the application of his method, he would not imagine that all cases would be equally so. Schroeder's operation was certainly not performed in the way that Mr. Treves's was done. As to enucleation, he would not attempt it as a rule, but would prefer to do hysterectomy. It was possible to do away with the pedicle entirely by employing a procedure which he had described, which combined the intra-peritoneal and vaginal methods.

Dr. O'CALLAGHAN of Carlow said that with regard to opium, it should not be given under any circumstances whatever. As to hysterectomy, it was utterly impossible to treat cases in the way which Mr. Treves had described. One advantage in doing a Porro's operation was that a uterus was removed which might give trouble by suppurating or inflaming. He had operated in a case of dry peritonitis with success, having enucleated caseous matter, stitched up the bladder, which he had accidentally opened, and broken down many adhesions.

Mr. BARKER referred to the distinction Mr. Meredith had drawn between dry and moist cases of tubercular peritonitis. The distinction was a good one, for they were different both theoretically and mechanically. In moist peritonitis we had something more acute, less liable to adhesion, which was early in its course, and therefore had not such a grip on the patient, and it was more amenable to treatment. Dry peritonitis, on the other hand, was insidious in its progress, usually a long time before coming for treatment, and when it did come the case was far gone and the dry process beyond our reach. The moist cases were easier to deal with than the dry, for in the latter there were strong adhesions and caseations which were just as liable to rupture into the gut as to shell out. With regard to treatment, he thought it better to withhold our hands at present from the dry cases and deal only with the moist until accumulated experience taught us what was best to do for the former.

Mr. ALBAN DORAN said that Mr. Meredith's valuable summary had strengthened his conviction that abdominal surgery must always remain more or less distinct from the surgery of other parts of the body. There was no doubt that it was through specialists that ovariotomy, oöphorectomy, hysterectomy, and operations in cases of ectopic gestation had been established as legitimate procedures. The special character of abdominal surgery depended upon conditions which, unlike surgery, never changed. Some who had joined in the discussion had spoken as though abdominal differed in no respect from general surgery. As far as homology was concerned the statement was true, but scientific homologies were useless to the operator, especially in a branch of surgery where matters of detail were of the first importance. The synovial membrane of the knee-joint and the peritoneum might be histologically homologous, but the different anatomical relations of the two membranes and the functions of adjacent parts had to be taken into account. In general surgery the area of operation could nearly always be kept in sight, both at the time and throughout the process of cure. In abdominal surgery the parts to be removed, incised, or drained could generally be kept in sight during the operation, but this was not the rule, and after the operation was completed the wounded parts were closed up, for even when a drainage-tube was used the peritoneum was closed, as far as observation and manipulation of the site of operation were concerned. Thus, after an abdominal operation of the usual type, there was an integumental wound, the parietal incision, and far away behind it, in a great cavity, lay another wounded structure ligatured or sewn up. Such a condition did not exist after amputation of the leg, removal of a superficial tumour, or ligature of an artery. Certain general surgeons who had joined in this debate had proved by their success that they happened to have qualities favourable for the speciality now under discussion. These gentlemen were exceptions which proved the rule; they were specialists who also undertook general surgery. They must know full well that if their province were to be seriously invaded by certain colleagues, who at present reaped well-merited glory in other fields of surgery, those colleagues would probably soon regret that they ever turned from vocal cords, aneurysms, and male urethras to the tempting task of removing ovarian cysts. Most significant was the fact that at some of the very same hospitals where these gentlemen practised the physicians in the obstetrical department had obtained leave to perform abdominal operations, chiefly on the score that they were more familiar with the parts concerned than were the general surgeons, and that therefore their prospect of success was greater. This regulation was an open recognition on the part of the medical schools that abdominal surgery was a speciality.

Dr. DAVID NEWMAN of Glasgow sent a contribution towards the debate. He held that in abdominal operations the question when to operate was the all-important one. During the early progress of ovariotomy, probably on account of its high mortality, a rule was laid down that only when the disease seriously impaired the patient's health was an operation by abdominal section considered justifiable. Now, with the practice of perfect cleanliness of the patient, and of all his surroundings, the abdomen might be

opened without danger so long as the health of the patient was good. The surgeon of to-day must concentrate his attention upon the means of forming an early and exact diagnosis, and with due caution the performance of an exploratory operation was a wise procedure. By delay the danger of the operation was increased by being necessarily more severe on account of the diminished strength and impaired health of the patient and the greater danger of complications and involvement of other organs. What was true of ovariotomy was also correct in respect to operations upon other abdominal organs, and certainly in regard to renal surgery; early operation and successful treatment went hand in hand. For instance, of pyo-nephro-lithotomies he had had sixty cases with thirty-four recoveries and twenty-six deaths, or a mortality of 43 per cent. Forty-nine cases of nephrotomy gave thirty-six recoveries and thirteen deaths, a mortality of 26·5 per cent.; while of forty-two cases of nephro-lithotomy, all recovered. Looking at abdominal surgery as exemplified by the results of the treatment of cystic disease of the ovaries, and to the renal diseases to which he had referred, it was clear that in the future the main energy of the physician and the surgeon should be devoted to perfecting our methods of diagnosis so that in a disease which was likely to prove fatal or gravely detrimental to the health of the patient an operation might be performed at the most suitable time, which in many instances was as soon as the nature of the disease could be recognised.

The PRESIDENT first referred to the more general subject of abdominal surgery, its history during the past, its position at present, and the bearing that its past and its present had had and was having upon the wider field of general surgery, of which it was merely a carefully cultivated acre. Mr. Treves, it appeared, would have us believe that abdominal surgery had merely advanced along with a general advance of the whole line. He could not allow such a statement to pass unchallenged. He believed that surgery and suffering humanity owed an immense debt to the pioneers of abdominal surgery, in that they set an example as to what could be done by a careful attention to detail in raising to the first place the success of operations before considered impracticable and unjustifiable, and in conquering prejudice by an honest and thorough publication of their results. He believed that if general surgeons had taken a leaf out of their book, and had been a little more accurate and candid in the publication of the results of their work, the advance in surgery, which all gladly recognised as being with us to-day, would have been with us long ago. He claimed for the early workers in abdominal surgery that they ploughed and prepared the ground for the marvellous change that had been brought about by the unwearying and profoundly scientific work of Sir Joseph Lister. If only the early workers in this special field had had the benefit of his teaching as to perfect cleanliness, the germ and fruit of antiseptic surgery, how incomparably more brilliant would have been the record of ovariotomy; and was it not to the work done in that operation, halting though it was, that abdominal surgery owed its present position? He did not deny that there was a great advance in the daring and in the success of many other branches of our great work; but here again the special tended to lead the general. Witness the surgery of the brain. He believed that the advance would be more rapid still if the surgeons of our great hospitals, with their magnificent opportunities, would give us more complete statistics of their work in many fields. He sympathised with Mr. Treves in his dislike of the extra-peritoneal treatment of the pedicle in hysterectomy by the wire serre-nœud; but he was bound to confess that, while he disliked it theoretically, it gave better results than any intra-peritoneal method which had yet been introduced. If any method could be devised by which the mucous cavity of the uterus, cervix, and vagina could be rendered surely aseptic, then the chief difficulty in the way of the intra-peritoneal treatment of the stump in hysterectomy would be overcome; but even then all difficulty would not be at an end, for the muscular stump, continuing to shrink, must always be in danger of bleeding; with the serre-nœud, however, he had not once seen trouble from this source. Whoever succeeded in meeting effectually the difficulties of securing perfect asepsis and safe ligature of the uterine stump will have made one of the greatest advances in abdominal surgery. Mr. Keith's suggestion of crushing before ligature was good, but such crushing added a fresh source of danger unless the stump could be freed from the causes of putrefaction. In big solid tumours every small twig finding its way to them became a large vessel which it was impossible to know beforehand and ligature. He did not agree that it was best to bring the peritoneal edges together over the surface of the stump; the latter should be left open and dry. In all very large tumours the bladder should be pulled back at once when exposed, before any tying of broad ligaments, and great care should be taken to avoid dragging up the ureters when the serre-nœud was tightened. He believed the operation for removal of the appendages for uterine fibro-myoma to be most valuable. In his hands the mortality had been under 5 per cent., and there had been only one failure as regarded ultimate cure. The great difficulty in advocating these operations was the uncertainty as to the time the cure would take. In this the artificial menopause agreed with the normal. The great point which wanted more light was the size of the tumour which might be dealt with in this way. It was essential to success that the ovaries should be entirely and cleanly removed, and the operator should be careful to avoid puncture of any vessel in transfixing the pedicles. A routine use of opium had yielded such good results with him that he had been slow to discard it, and he could not think it could do much harm when he could record in his recent ovariotomy work a hundred cases with only one death, that occurring in a few hours from shock and collapse, the patient being very ill with peritonitis when he operated. On the other hand, he found that his nephrectomies did remarkably well without any opium at all. He was certain, however, that the patient made a much more comfortable recovery when kept under opium. He liked drainage better than he did, and was certain where there had been much adhesion a drained case made a smoother recovery than without the tube, though it was bad practice to leave it too long. He was not yet a convert to flushing with warm water, except when septic material unavoidably gained access to the peritoneum. He asked how Mr. Meredith, if he did not boil the water, could be sure that it was free from actual septic contamination. We especially wanted light from the pathologist as to diseased conditions of the ovary which could not be recognised by sight or touch. He agreed with Mr. Mayo Robson that operation on cases of tubercular peritonitis did good only when there was considerable effusion or suppuration; in cases of mere matting of the intestines, he believed it often did harm. He had twice recently dealt with stones impacted in the common bile duct, by incision, removal of stone, and suture, with success. In conclusion, he congratulated the Society and the profession on the present position of abdominal surgery being such that there were few burning points to discuss; the fierce controversies of the past were settling down into a general agreement on the chief lines on which all good work must proceed, and such fighting as remained to be done must be over points of detail and exact method. While congratulating ourselves on this, however, and on the disappearance of strong personal feeling from our debates, which must always be out of place in scientific work, he expressed the hope that we should not go into the other extreme and agree too well on every detail, for with the disappearance of a healthy spirit of emulation he feared the vitality of the work might suffer. One thing he hoped they would be always rivals in, and that was rivals in attaining the best results.

HUNTERIAN SOCIETY.

A CLINICAL MEETING was held on April 9th, Dr. Stephen Mackenzie, President, in the chair.

Congenital Dislocation of both Hips.—Mr. BIDWELL exhibited a female child, aged six years, with Congenital Dislocation of both Hips, the head of the femur lying upon the dorsum ilii, the trochanter being an inch and a half above Nélaton's line. The child had also lateral curvature of the spine, and there were slight signs of rickets. She had never walked; the legs were thin, not wasted; knee-jerks present. She was being treated by extension with 5 lb. weights.

Congenital Nystagmus.—Mr. COTMAN showed an infant, aged about six months, with Congenital Nystagmus, the movements being vertical. The infant was plump, the eleventh child of a healthy woman. He was inclined to

attribute it to a local chorea. Vision and intelligence appeared unimpaired, but the father was a heavy drinker and had strange delusions.

Rheumatic Nodules.—Mr. COTMAN also showed a case of numerous Rheumatic Nodules on the hands, elbows, and knees of a boy, aged sixteen years, who had had rheumatic fever two years ago. Well-marked mitral disease and hypertrophy of the heart were present. Temperature just below 100°.—The PRESIDENT and Mr. F. R. HUMPHREYS alluded to cases where nodules occurred in connexion with syphilis, or with muscular rheumatism, independently of acute rheumatism.

Papilloma of Larynx.—Dr. DUNDAS GRANT showed a case of Papilloma of Larynx in a girl of eight years, with loss of voice for four months, and attacks of dyspnœa; a large papilloma was found, of hour-glass shape, partly above and partly below the glottis. After several attempts with the snare a good part of the growth was removed with Mackenzie's forceps, and the voice returned. A practical cure had thus been effected, although considerable sessile papilloma remains on the left vocal cord.

Ectopia Testis Cruralis.—Dr. W. FOWLER showed an example of this condition in a patient aged seventeen. Over the left saphena opening was a superficial fluctuating tumour about the size of a split Tangerine orange, at the lower part of which the testis and cord could be felt Above the tumour was an ill-defined fulness reaching up to Poupart's ligament. Here alone there was very slight impulse on coughing, but not that characteristic of bowel. When lying down a certain amount of fluid could be displaced from the tumour into the fulness above it, as though the processus vaginalis were not obliterated. The displaced testicle was small, tender, and possessed testicular sensation. The lump had been noticed about ten years, lessening in size on lying down. The only inconvenience had been some aching in the part, especially after exertion. The patient wore a truss for ten years in the belief it was a hernia. He is in apparently good health except for chronic constipation. In former years he used athletics. Excision was recommended on account of the dangers—(1) that hernia might follow, (2) that the gland might take on sarcomatous growth.—Mr. RIVINGTON considered the case of great rarity. He would leave it alone unless it became more inconvenient.

CARDIFF MEDICAL SOCIETY.

Use of Borax in Epilepsy.

THE monthly meeting of this Society was held on Thursday, April 3rd, Dr. Edwards, President, in the chair.

A paper was read by Dr. STEWART, Assistant Medical Officer at the Glamorgan County Asylum, on cases illustrating the value of Borax in Epilepsy. Case 1, admitted at the age of thirteen, had had epileptic seizures dating from birth, occurring in numbers varying from two to twelve per day, and chiefly at night. She had been under treatment repeatedly, but had derived no benefit. Without treatment the fits during the first week were twenty-six in number, under borax they were reduced to twenty-four in the second and five in the third week. After an interval free from fits of sixteen days, four occurred on two successive nights; then after another interval of nine days a single fit took place, and since that there had been no recurrence of fits—i.e., a clear interval of over a month. Case 2 began to suffer from nocturnal epilepsy at eighteen, and came under treatment five years afterwards. This instance was complicated by serious cardiac disease, stenosis of the mitral orifice. Without treatment, the average monthly number of fits was 101, and under borax this was reduced to twenty in the first month, seven in the second, one in the third, five in the fourth, none in the fifth, and one in the sixth. Case 3 had whooping at seven, followed by left hemiplegia, imbecility, and epilepsy. The average number of fits per week when no special treatment was employed was 3·5, and bromide failed to effect any reduction, for after being under treatment for two years and a half the weekly average had risen to sixteen. Under borax the weekly average during the first month was reduced to 15·5, and during the second month to 11·5. The diminution took place chiefly in the nocturnal seizures. In Cases 4, 5, and 7, in which the fits occurred both by day and night, bromide was shown to exercise a decided influence upon the diurnal seizures, leaving the nocturnal practically unaltered, and in these benefit was experienced from the combined use of bromide and borax, three doses of the former during the day and one single dose of the latter at bedtime. Case 6, epileptic and imbecile from birth, came under treatment at thirty-five. The fits were of the nocturnal type; were uninfluenced by bromide, and were slightly diminished by borax. Dr. Stewart concluded that borax exercises a peculiar influence over nocturnal seizures, and that it is in cases where fits are entirely of that kind that the greatest good may be expected; that bromide, on the other hand, exerts a more powerful influence over diurnal seizures, and that in cases characterised both by day and night fits, a combination of these two remedies will be productive of most benefit.

Notices of Books.

Arbeiten aus der Ersten Medicinischen Klinik zu Berlin. Herausgegeben von Dr. E. LEYDEN. I. October, 1888, bis October, 1889. Berlin: A. Hirschwald. 1890.—Professor Leyden has collected here the various papers and cases published from his clinique during the past year. The result is a compilation of considerable interest. The first place is taken by the instructive paper which Professor Leyden read before the Verein für innere Medicin upon Prognosis of Heart Disease. He shows how changed is the standpoint from which such diseases are now regarded, as compared with the time of Corvisart, and discusses the prognosis, first, with reference to the general condition and vital relations of the patient, then in regard to special forms of heart disease, and, lastly, with respect to certain symptoms. The essay is one which deserves careful perusal, and its whole aim is to diminish the too pessimistic views often held on this important matter. Professor Leyden also contributes a note upon Cardiac Disease in Tabes Dorsalis, and a paper upon Bright's Disease in Pregnancy and Parturition, in which he adduces evidence in support of his contention that there is a special form of renal disease in these conditions as well as a liability to infectious or septic nephritis. Dr. Renvers contributes a paper upon Empyema and its Treatment, illustrated by numerous cases; whilst Dr. Scheurlen, pursuing a subject that owes much for its elucidation to Leyden, writes a paper upon Pyothorax Subphrenicus, in which he collects many published cases. Professor Leyden also discusses the question of Perityphlitis from Perforation of the Appendix. Dr. Klemperer furnishes some articles on Diseases of the Stomach, including an exhaustive study of Dyspepsia in Phthisis. Besides these papers there are several clinical records of various forms of disease, and the whole collection speaks well for the activity in scientific medicine displayed in the First Medical Clinic by its director and his able assistants.

The Abolition of Suffering. By S. B. MCKINNEY, M.A., L.R.C.S. & P. Edin. London: Elliott Stock, 62, Paternoster-row. 1890.—This book is one of the class whose aim is to reconcile the teaching of revelation with that of science. Its more immediate purpose is to show that the cure of human ills consists in obedience to the laws of God, which are expressed partly in Scripture, partly in the unwritten book of nature, and are mutually compatible. Disease, pain, depravity, and unhappiness are unnatural. They have arisen through error occurring somehow in a perfect original. They are not due, but contrary, to God's will, and point by contrast to a more perfect state, which can and shall be, and even perhaps is attained when the mind of man accepts the ruling of that higher authority. A discussion of moral and material evil and the curative and antiseptic effect of religion, especially of Christian

faith, and a scientific explanation of the resurrection are noteworthy. Tolerance between science and religion is the subject of judicious comment, and the author's protest in favour of a happy and hopeful faith, if somewhat forcible, is distinctly healthy.

Traité Pratique d'Accouchements. Par le Dr. A. AUVARD. Paris: Doin. 1890.—This volume claims attention as the work of one of the rising obstetricians of France. Its scheme is a large one, and seems to us to need more than 748 pages of rather large print. The national love of classification is apparent throughout; the illustrations are 534 in number, and are mostly diagrammatic. It is, in our opinion, always best to state when a drawing is intended to be diagrammatic, and when it is from nature; moreover, copies of drawings and diagrams should always be acknowledged. The classifications and illustrations in this book have rather starved important subjects, such as that of extra-uterine gestation and labour in contracted pelvis, neither of which is more than touched upon. Many other subjects, especially those which have been the subject of investigation by Parisian accoucheurs, are more adequately dealt with. The author has not had the courage or the conviction to depart from the French nomenclature of the oblique diameters of the pelvis, which they alone, of all nations in the world, retain. Time only confirms our opinion that, in scientific matters, the English nation is the most cosmopolitan and the least insular of all.

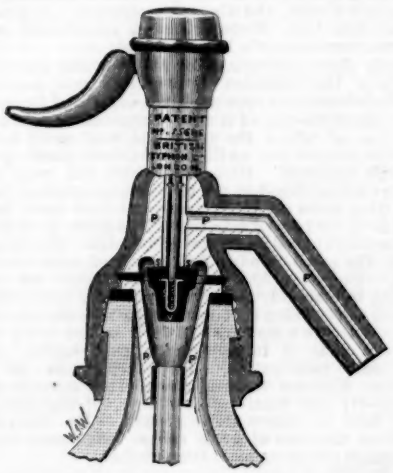
Exercises in Practical Chemistry. An Introduction to Qualitative and Quantitative Analysis. By Dr. W. R. HODGKINSON, F.R.S.E., F.G.S. London: George Kenning. 1889.—This is a little book for the laboratory bench. It consists of sixty-four pages, somewhat largely printed, bound in limp paper covers. There are so many books of a similar character to choose from that it is difficult to say which one is really best fitted for the purpose in view. We believe, however, that the plan adopted by Dr. Hodgkinson in the work before us is a good one. The student is directed first to carry out experiments with the common elements themselves, both the metals and non-metals. In this way he is better prepared for the subsequent study of the reactions of the metals in solution which are next considered, whilst the usual tables illustrating group separation are inserted in their appropriate place. Then follows a general plan of qualitative analysis. The book finishes with a short study on acids, and a useful sketch of the well-known methods for the preliminary examination for bases and acids in unknown substances. These "exercises" are well adapted, we think, to the requirements of students who have just completed their first theoretical course.

PRIZE OF THE BRITISH MEDICAL TEMPERANCE ASSOCIATION.—Some months ago the Council of the British Medical Temperance Association offered a first prize of ten guineas and a second prize of five guineas for a competition on the nature, action, and effects of alcohol. The competition was open to medical students of all the schools in the United Kingdom, and the examination was held simultaneously, by written papers, in London, Edinburgh, Glasgow, and Belfast. Several students entered, and their answers were submitted for adjudication to Drs. P. W. Richardson, Norman Kerr, Moir, Morton, and Ridge (London), Professor Simpson (Edinburgh), and Professor Sinclair (Belfast). The adjudication has now been made. The first prize has been awarded to Mr. James M'Kendrick of Glasgow (son of Professor M'Kendrick), and the second to Mr. William R. Smith, of King's College, London. Mr. Gerald R. Leighton (Edinburgh) and Mr. H. S. Wansborough Jones (Edinburgh) were awarded honourable mention. The competition amongst the four gentlemen named was exceedingly close, and the results altogether were so satisfactory that another competition on the same lines will probably be held next year.

New Invention.

PORCELAIN-LINED SYPHON-HEAD, FOR AERATED WATER SYPHON BOTTLES AND GAZOGENES.

THIS invention seems to have supplied what has long been needed—a perfect syphon-head. All aerated waters, and particularly those containing acids, are apt to act upon metals, and serious metallic contamination has sometimes arisen from this cause. In the new apparatus such corrosion cannot possibly occur, for the simple reason that the beverage does not come into contact with the metal at a single point. The internal fittings are, as shown in the figure, made of solid porcelain, merely protected by an external layer of



metal, so that, even if the syphon were inverted, no chemical action could take place. The piston is protected by ebonite, and the valve is made of some rubber composition. It is evident that these fittings are equally applicable to gazogenes, and in fact the apparatus submitted to us was, as far as we could discover, faultless in every detail. The patentees of this invention are the British Syphon Manufacturing Company, 2, Gresham-buildings, Guildhall.

THE PREVENTION OF INFECTIOUS DISEASE: NURSES AND SCARLATINA.

To the Editors of THE LANCET.

SIRS,—Having experienced great difficulty in making sure that nurses are free from all infection after waiting upon cases of scarlet fever, I have been led carefully to consider the matter, and venture to put forward the following suggestions. Every nurse should be provided with two tin boxes, and each box should contain a complete change of clothing. One of these, with a permanent distinctive mark upon it, should be placed in a spare room quite unconnected with the infected ones, directly it enters the house; the other of course should go to the room which the nurse is to occupy during the continuance of the illness. In this way the nurse, after leaving all her infected clothing behind the sheet in a solution of creolin or carbolic acid, can, after her bath and wrapping herself in a clean blanket which has been thrown down outside the sheet, go into the uninfected room and dress in perfectly fresh clothing. The management of the infected room has been perfectly dealt with before, and therefore there is no occasion to enter upon this matter. Each nurse should be supplied with a set of rules, showing what precautions are necessary. Going back to the infected rooms after they have been once left should be strictly forbidden, at any rate till they have been properly dealt with.

I am, Sirs, your obedient servant,

Surbiton. F. P. ATKINSON, M.D.

THE LANCET.

LONDON: SATURDAY, APRIL 26, 1890.

ONE copy of the Medical Register is very much like another, and to the extent of some eighty-eight pages the material seems almost identical. In a great measure the identity is verbal and absolute, consisting of Acts of Parliament and such-like unvarying documents. But, nevertheless, the volume is always a matter of interest to the profession, and constitutes its visible roll and record in all the courts and public offices and public libraries of the kingdom. And, on a closer comparison of one volume with another, it will be found that there are variations in the account of the profession, and some of them of no mean significance to those who are either in the ranks or thinking of joining them. To the individual medical man his appearance in this Register is essential for public professional purposes. Without it he has no legal status for signing a medical certificate, for giving medical evidence, or for enforcing payment of a bill from an unprincipled or ungrateful patient. And to the profession at large there are tables of facts and information in this volume and the volumes which usually appear at the same time—viz., the Register of Medical Students and the Dentists' Register—which should receive far more attention than is usually accorded to them. It is not a little curious that while 1860 volumes of the Register are supplied *gratis* by the Government and 1395 by the Medical Council (chiefly to those registered for the first time in the given year), only 221 copies of the Register are actually *sold* at a price of 6*s*. The explanation, doubtless, is that the Medical Directory supplies the profession with very much the same information, besides a great deal more that cannot be given in a strictly legal Register. But, nevertheless, the Register is the legal list, and has a character and value all its own.

The great question we ask in regard to the new roll of the profession is, What are the numbers of the host? Are they less or more—increasing or diminishing? Is the rush into the profession abating? Last year there seemed some sign of a tendency to more moderation in this, both in England and in the United States. In the Register for last year the number of new registrations, really those for 1888, was 1184, which was the smallest number which had registered for five years. This year the number is 1305, or an increase over the previous year of 121. There have been four years in which this number was exceeded. In 1887, the largest number of new registrations (1531) took place; probably then the new legislation of 1886 determined many to register quickly who would not otherwise have registered then. In 1886, 1431 were registered for the first time; in 1885, 1377; in 1884, 1388. The Registrar gives us in the instructive Table V. the number of registrations, in each division of the kingdom, for the last fourteen years—1875 to 1890, not inclusive. The average annual registrations in the first five years of this period were 1012. Those of the last five years of the period were 1366. Though the numbers for the last year fall short of the average of the last five years, they exceed those of the previous year, as we have said, by 121. The whole number of practitioners registered in the Medical Register for the present year is 28,348. This number exceeds that of any previous year, and that of the immediately preceding year, by 409. There are two other sources of information as to the numbers of the profession, present and prospective, which it is interesting to consult in this connexion—the Medical Directory and the Medical Students' Register. And certainly in neither of them do we find any ground for anticipating that calamity which Sir LYON PLAYFAIR once conjured up before Parliament of a possible dearth of medical men. The number of practitioners given in the Medical Directory is 29,372, or 1024 more than the number given in the Register. It would be interesting to know which is the more correct account, whether the 1024 represent genuine and living practitioners who, for one reason or another, do not choose to register, or whether it is largely made up of men who are out of work or deceased. The distribution of these enormous numbers is a matter of interest. It is thus given in the summary of the Medical Directory. Practitioners in London, 5077; in the provincial list, 13,715; in Scotland, 2658; in Ireland, 2577; resident abroad, 2697; in the Naval, Military, and Indian Medical Services and the Mercantile Marine, 2648. The other source of information is not reassuring to those who think the profession already overfull. It is the Medical Students' Register, issued by the General Medical Council, and containing much useful information of the schools and the preliminary education of medical students. From this we learn that last year the number of medical students in England was 2027, this being more than it has been for seven years, though oddly enough eight or ten years ago it went up to 2171 and 2106. The natural waste of the profession by death continues altogether disproportionate to the addition to its numbers. In the last year the Registrar had been able to obtain information of the deaths of 564 registered practitioners, which is twelve below the average of fourteen years, and represents a rate of mortality of 20·3 per 1000; not only considerably lower than that given by Dr. OGLE in his important paper on the mortality of medical men, but materially lower than that of men in "all occupations"—viz., 22·83. We take this diminishing mortality as a grateful indication that medical men are taking a little more care of their own lives while occupied mainly in trying to save the lives of others.

OUR friends in Scotland are at present much exercised as to what will be the outcome of the sanitary clauses in their new Local Government Act. It differs from the English Act in this most important respect—that each county is compelled to appoint public health officials. Clause 52 runs thus: "The Council of every county shall appoint and pay a medical officer or medical officers and a sanitary inspector or sanitary inspectors, who shall not hold any other appointment or engage in private practice or employment without express written consent of the Council." This seems plain enough and explicit enough,

and the variety of proposals which the subtlety of the Scotch intellect has evolved towards the carrying out of so simple an enactment is almost bewildering to the southern mind. Some of the counties are small and poor, and in no case have the Councils charge of more than the rural population, each burgh, however trifling in extent, having the privilege (?) of retaining its own staff of officials. In order, therefore, to meet the financial aspects of special cases the above clause is so worded that nothing in it prevents two contiguous counties from appointing the same medical officer. And in this fact a whole crop of schemes find their origin. The principal of these are two in number. Their author suggests not merely that a couple of weak counties should unite their purses to secure a single officer, but that as many as six or seven counties, some of them neither small nor poor, should effect a similar union, so that the whole country should possess only six medical officers, situated respectively at Edinburgh, Ayr, Stirling, Glasgow, Aberdeen, and Inverness. As was pointed out by our Edinburgh correspondent last week, this scheme is entirely insufficient, although, if adopted, it might ultimately be developed into a satisfactory system by the gradual addition of assistant officers; and unquestionably, as a writer in the *Glasgow Herald* points out, there might be advantages in the establishment of large areas, which, under one head, would be likely to secure something approaching uniformity of sanitary procedure. But, after all, this really does not seem to be in accordance with either the spirit or the intention of the Act, and, moreover, there are no signs of any steps being taken to bring about any such arrangement. And, indeed, when we look at the scheme in the light of details proposed in support of it (as we learn from the *Scotsman*) by the secretary of the Board of Supervision (the body corresponding to our Local Government Board), the whole thing becomes reduced to a farce. For it is suggested that each of the six officers should be endowed with the munificent salary of £500 (rising to £600) per annum! To offer such terms would be little less than a public calamity, for it is hardly conceivable that the most competent sanitarians in Scotland would dream of jostling each other in competition for such posts, and it would be worse than unfortunate if the sanitary reformation of which Scotland has so long stood in need should now have to be carried out under the supervision of any but the very best men that the country possesses. The rural districts of Scotland are at present, it appears, officered by no less than 412 medical men and 718 inspectors, and the exact amount of attention that these officials are expected to devote to their duties may be judged of by the fact that the average yearly salary of the former is £4 10*s.*, and of the latter £6 8*s.* It was understood that the present Act was to sweep away this utterly indefensible system. Instead, each county was to have its own staff; and besides, the county was to be divided into a few large districts, each of which also would have its own officers, it being provided at the same time that the county officers might, if their duties permitted them, act also as officers for one or more of the districts. But it seems now to be in effect proposed, in connexion with the scheme under review, that in addition to the half-dozen chief medical officers at £500 a year, the present army of men at salaries of 90*s.* should be retained as substitutes for the district officers contemplated in the Act, the legal difficulty being evaded, we presume, by giving the title of district officer to one individual in each locality. Whether these views be indeed those of the Scotch Board of Supervision we do not know; but if so, it is regrettable that the central public health authority of Scotland should be possessed of any such opinions.

But, to sum up, what is to hinder the County Councils, looking their monetary and other difficulties fairly in the face, from accepting their Local Government Act in the sense in which obviously it was intended to be accepted? Let the smaller and poorer of the counties unite, where necessary, with each other or with their wealthier neighbours. And let them at the same time, wherever possible, lessen their burdens by giving district duties to the county officers. But let them, besides, recollect that as time passes their burdens will get lighter, as it is only to be expected that the smaller burghs, even if not forced into compliance by a new Public Health Act, will soon learn that it is to their advantage to have a share in the public health system of the county in which they are situated, and to cast in their lot, sanitarily speaking, each with its own county. And finally, as to salaries, for all the fractional difference in taxation that £200 or £300 a year extra would make, it is surely far better to give adequate remuneration to good men, capable of advising and guiding through every emergency, than to offer, say, £500 a year to such insufficiently equipped individuals as might find it to their profit to apply for it. Indeed, the County Councils of Scotland may accept this as an axiom—that if their medical officer is not worth £800 a year he is not worth having, and that if they do get him to undertake work at less than his fair value—he being, after all, only human—they will run a risk of receiving from him only a half-hearted and discontented service.

OUR readers have, no doubt, kept themselves more or less conversant with the progress of hypnotism in France, Germany, and other parts of the continent within the last few years. The success attending the great clinique of M. CHARCOT at the Salpêtrière, is proof, at least, of the wide interest excited by the subject, which has also engaged the labours of VOISIN, BERNHEINOQ, HEIDENHAIN, and LIÉBEAULT. The literature of the subject is already extensive, and grows apace. More than one review is devoted mainly to hypnotism, and during the past years memoirs or systematic manuals dealing with the question have been published by MÜNSTERBERG of Freiburg, MOLL of Berlin, and BEAUMIS of Nancy. Not only is the subject admittedly one of wide theoretical interest, but the greatest practical results are claimed for the therapeutic applications of hypnotism, which is alleged to be efficacious in such maladies as insomnia, nocturnal enuresis, chronic diarrhœa and constipation, hay fever, functional dysmenorrhœa, and even in certain definite organic affections, such as tabes dorsalis and some varieties of the rheumatic state.

In spite of a formidable array of authorities and evidence, the general attitude of the profession in this country towards hypnotism has remained one of great reserve, for which there have been at least two excellent grounds.

First, those who have the advantage of familiarity with the literature of Mesmerism and Braidism are aware that much that has been lately paraded as novel is really a revival of ideas that had their day of fame, but which speedily fell off into quackery and thaumaturgy, and of which the net result was discredit to science and disappointment to hopes incautiously excited. Secondly, the good sense and good feeling of many have been outraged by the practice, which unhappily prevails in some parts of the Continent, of holding hypnotic *séances* and show-exhibitions at which the public are invited to be present on payment of an entrance fee. We cannot conceive anything more repugnant to sound humanity or more foreign to the true scientific spirit than such deplorable performances. We rejoice to recognise that the British nation has no monopoly of its detestation for this prostitution of science for the gratification of vulgar curiosity, and we welcome the news that the French Minister of Marine has within the last few days issued a circular forbidding such performances in the French sailors' hospitals and convalescent homes. The abuses of a system, or method, must not blind us to its uses, but the facts just adverted to are at least an explanation and justification of the tardy recognition of hypnotism on this side of the Channel.

As to the fact of hypnotism, no reasonable doubt is any longer possible that some persons possess the power of inducing varying degrees of somnolency in certain subjects. Regarding the *rationale* of this phenomenon we are still very much in the dark. It belongs to that difficult region where physiology and psychology come into contact, and shares the obscurity which hangs over the whole subject of the true nature of mind. No satisfactory answer has ever been given to the objection of HUME that we know nothing of mind but its manifestations; in other words, we know something of such faculties as will, imagination, memory, emotion, &c., but of the true "essence" of mind we know nothing whatever. When, therefore, in connexion with hypnotism we talk confidently of the influence of mind upon mind we are really using language that requires interpretation, and are employing phraseology to which no precise meaning can be attached. Whether the will of the performer or the expectancy of the patient, or both combined, are the essential factors must remain doubtful. What is certain is that, in some way not yet clear to us, the operator has the power of closing the channels of ordinary thought on the part of the patient, and of directing his attention exclusively to some particular organ or function. This is the necessary preliminary to that "treatment by suggestion" which is the most important feature of hypnotism, and it seems impossible to resist the evidence that the hypnotised patient may be so acted upon by suggestion as to bring about real changes in certain morbid states. There is no *a priori* difficulty in anticipating such a result. The influence of mind upon body seems to defy precise formulation, but no one denies its immense potency. In the hypnotic state this influence is apparently much intensified, the patient's receptivity is greatly increased, and there is a peculiar specialisation, if we may so express it, of the control of mind over physiological or pathological processes. Such considerations would lead us to expect that in functional nervous affections hypnotism might be a therapeutic agent of real value. If we take such a troublesome and rebellious symptom as insomnia, all our knowledge of the subject would lead us to anticipate benefit from "treatment by suggestion" in such a case. Sleep is one of the most automatic of functions; its occurrence is almost rhythmical in regularity; but when, from any cause, that rhythm has been frequently interrupted, there seems to be developed a condition in which the patient is sleepless because he fears that sleep will not supervene at the usual time. If in such a condition the suggestion is made upon the mind with all the intensity which hypnotism secures that sleep will supervene, it is not difficult to understand that the desired result should follow. Other functional nervous disorders may probably obey a similar law, but it is difficult to believe that hypnotism can possess that efficacy in organic affections which has been claimed for it. Cases of insanity form a class by themselves where hypnotism would seem likely to operate with peculiar intensity, though very probably its dangers would also be exceptionally great in this department. The experiments of VOISIN in this connexion have at least established a claim to careful and unbiased consideration. As regards the value of hypnotism as a means of securing anæsthesia preparatory to surgical operations, we should require a very large mass of unimpeachable evidence to induce us to renounce such efficient end, on the whole, such safe agents as chloroform and ether for a method of which the utility for such ends has yet to stand the test of prolonged trial, and which possesses peculiar dangers of its own.

As regards the drawbacks, inconveniences, and positive evils which beset the practice of hypnotism, we are hardly yet in a position to speak confidently. Analogy would lead us to fear that, inasmuch as the best subjects for hypnotic experiment are persons of mobile, susceptible, and unstable nervous systems, the risk of aggravating a nervous disorder which we aim at removing would be not inconsiderable. At least three distinct dangers may be apprehended from hypnotism: first, that a general condition of neuromuscular excitability may be induced, as has been shown by PREYER, SEELIGMUELLER, and others; secondly, that the operator may not always be able to secure a speedy and complete return to the normal condition after the hypnotic trance; and, lastly, that in unscrupulous hands the patient may be impelled by suggestion to perform acts which he might afterwards regret. These dangers are so grave that they must never be left out of account in striking a balance between the benefits and evils likely to accrue from the general adoption of hypnotism as a recognised resource of the medical art.

It is unsatisfactory that a subject of so much interest should remain in this doubtful state, and that practitioners in general should, for want of leisure and opportunity for investigation, be compelled to maintain an attitude of hesitation and reserve. We think the subject is ripe for thorough and independent investigation, and we would earnestly commend it to the attention of our medical societies. If the Royal Medical and Chirurgical Society would take it up and submit it to a searching

inquiry, the result could hardly fail to prove of great value, and might dispel some of the darkness which still hangs over the question of hypnotism.

IN commencing, with the April number, the 120th volume of his *Archiv*, Professor VIRCHOW offers a warm greeting to all who may visit Berlin to share in the International Congress which will take place from August 4th to 9th. He then proceeds to an interesting retrospect of the condition of medical science at the time when, forty-three years ago, the journal was founded. At that time, he says, almost the only bond between the nations was the literary one, and to so great an extent was this carried that in Germany there was almost more study of the works of others than production of them in that country. The German medical press especially needed a new departure, which was taken in the foundation of the *Archiv* by himself and his long-lamented colleague REINHARDT, and in their prospectus of the new journal they said that in the foundation of a new medical journal "we are going to supply a need which has been felt by ourselves and by North Germany in the lack of any specially characteristic periodical." Disclaiming any intention of comparing the present state of medicine with that then existing, Professor VIRCHOW remarks that the change in the improvement of methods of research is mainly to be found in the introduction of systematic inquiry. Medicine has entered into the ranks of the sciences, and has so altered that there is no comparison between it and the medicine of past times. This is largely due to the introduction of scientific methods, and of the means of personal intercommunication of ideas which in science was set on foot by a previous generation, in the foundation by OKEN and his friends of the "Gesellschaft Deutscher Naturforscher und Aerzte." At the meetings of this Association views and methods were discussed and compared, authorities were questioned, systems exploded, and experiments sifted. The result has cost time and trouble, and although the younger generation may not always appreciate this, yet to the older ones the retrospect is full of satisfaction. Nor is the world unmindful of what has been done. German medicine has gained in esteem, and the number of those who are following her paths has become very large. The Association of Naturalists did much to knit the bonds between countries. Neighbouring peoples were represented at its gatherings by its scientists and by younger men beginning their course, and Professor VIRCHOW says that from the first meeting at which he was present at Aix in 1847, until the last meeting at Heidelberg, he can testify to the firm and lasting personal relations there gained, and to the great influence which the acquaintance with a culture previously strange to him has exerted on him. Since then advance has been rapid, by the formation of similar associations both in Germany and abroad, culminating in the conception of international congresses. He recalls with interest the first of these congresses, which took place at Paris under the presidency of BOUILLAUD. "Small in the number of its partakers, very moderate in its results, modest in its claims, it in a special way marked the junction between the old and new era." At Amsterdam in 1879 there was a great gathering of the learned of all nations; then London formed the rendezvous of the whole world, and in Copenhagen in 1884 there were not lacking associates from all countries. The invitation to Berlin then given by Germany was set aside in favour of Washington, in consequence of the protests of the French members. This is perhaps the only occasion on which political feeling has prejudiced the purely neutral relations of nations in international congress. But the International Congress works for peace, and no artificial hindrances should be allowed to thwart the intercommunication of ideas. The Washington Congress voted for Berlin as the next meeting-place, and Germany welcomes all from every land. In a generous passage VIRCHOW says that they (the Germans) will gladly learn from others, and will be mindful of the susceptibilities of all. Medicine and humanity are the only aims of the Congress. In this spirit have the invitations been sent out; in this spirit he trusts they may be accepted. He concludes: "Let us show the world that even the sharpest differences may be peacefully discussed, and if not always dispelled, at least allayed. Let us show that the pursuit of medicine ennobles men, and brings them nearer to the ideal humanity. Let us strive together, as in war, so in peace, to heal the wounded and cure the sick, no matter to what camp they belong. For we physicians do not make war; it is our first and fairest task to mitigate its terrors, and to replace hate and discord by reconciliation and unity." Speaking for ourselves, we trust that these words of the President-elect of the Berlin Congress will go far to assuage the feelings of those who, urged by notions of mistaken patriotism, think that an abstention from a scientific gathering is called for because their hosts were once opposed to them in the field of battle. But surely medicine knows nothing of politics or of the lust of power and territory. Its battle-ground is trodden by all mankind; in the strife against the common enemy all nations are combined. We agree with Professor VIRCHOW, whose whole life has been devoted to the pursuit of science, that in these international gatherings no other thought should enter but the one desire to benefit man, and we see in them the promise of the dawn of peace among nations which our statesmen and politicians are unable to discern. It is a hopeful fact that in such an assemblage the learned of all nations meet to interchange ideas on subjects of the highest importance to the whole world, and that such intercourse is highly favourable to the cultivation of a better acquaintance with those from whom political and national feeling may have caused an estrangement. Professor VIRCHOW occupies a pre-eminently advantageous position for offering a review of the history of modern medicine. He sees what great advances have been made in medicine by the multiplication of opportunities for the interchange of ideas, and has noted how the barriers are being broken down between nations concerned in a common task. For the good done by international congresses is not confined to the discussions which take place during the few days of the meeting. It is far more permanent, and most of all the benefit is to be found in the mental and moral discipline that comes of the interchange of thought and the opportunity that is given to learn of others, no matter what may be the

divergencies of political opinion that may temporarily interfere with the amity of nations. For science will endure when all these conflicts have been long forgotten, and the fruits of such international intercourse will be reaped by future generations when wars and their causes have become mere matters of history. We believe, then, that the forthcoming Congress at Berlin will prove of great advantage to the cause of peace; that it will be a signal success from a scientific standpoint we have no doubt; whilst the fact that it will be presided over by a man who is so completely filled with the true spirit of science will go far to render it not the least memorable gathering of its kind.

THOSE who are interested in questions concerning the public health cannot complain that members of Parliament have been backward in claiming consideration for the laws which deal with this subject. The promise which the Queen's Speech contained, that the Housing of the Working Classes Acts and the Metropolitan Public Health Acts should be consolidated and amended has not as yet been fulfilled, but there is no apparent reason why this work should not be completed before the end of the session.

In the meantime, however, Parliament has been engaged in the consideration of Mr. LEES KNOWLES'S useful measure, the Infectious Diseases Prevention Bill. Mr. KNOWLES has collected in one Bill a variety of provisions not embodied in the general statistics, but obtained by different local authorities who have felt the need for further powers than those given them by the Public Health Act of 1875. Mr. KNOWLES'S Bill makes these powers available in every urban and rural sanitary district after their adoption by the local authority. London he deals with differently, and, following the precedent of the Infectious Disease Notification Act, he makes his own measure apply to the metropolis within two months after it has become law.

The most useful powers which it enables local authorities to obtain are those for the limitations of injury due to the distribution of an infected milk-supply. Every dairyman supplying milk within a district may be required to furnish to the local authority a complete list of his customers within the district on payment of a small sum, when the medical officer of health suspects that the outbreak or spread of infectious disease is due to the milk-supply. This is a provision to which, we understand, dairymen have taken exception, on the ground that the inquiry which a medical officer of health makes when milk is under suspicion is itself injurious to the business of the dairyman. An objection such as this has, however, little weight at the present time, for the notification of infectious diseases gives the medical officer of health the information which he formerly sought by house-to-house inquiry. The medical officer of health, having obtained the knowledge that the milk is injurious, is able to inspect the farm and cattle, and his authority may prohibit the sale of the milk within the district in which they are situated. If these powers are promptly acted upon, the frequency with which milk epidemics attain considerable proportions ought to be limited. There is in the Bill as it now stands a limitation which we do not doubt is the result of intention, but the wisdom of which appears to us to be a little questionable. The local authority can only prohibit the sale of milk under this Act when the incriminated dairy is situated beyond the limits of the district; for the prohibition of milk supplied from dairies within the district the provisions of the Contagious Diseases (Animals) Act are apparently to be relied upon. If we are right in our surmise, we fear the latter will be found to be inadequate; and we trust, therefore, this point will be carefully considered by the promoters of the Bill before it passes into law. An amendment which has been proposed by Mr. H. L. LAWSON will commend itself to those who dwell in the metropolis. Mr. LAWSON'S object is to exclude from the county of London any milk-supply which is found to be producing injurious results in any one district, and his amendment therefore confers this power upon the County Council, who will further, in exceptional cases, be able themselves to inquire into outbreaks of disease spread by milk. We presume the Council would only undertake this latter duty when the area of the distribution of the milk rendered it necessary that the inquiry should be conducted with a body having jurisdiction over the county.

A further provision in the Bill gives to local authorities the opportunity of obtaining for their medical officers of health the same facilities for inquiry into diseases spread by laundries as in that spread by milk. Infectious disease is undoubtedly occasionally distributed in this manner, and the power, although less important than that relating to milk, is one which may exceptionally be found to be useful.

Another clause gives the local authority itself power to undertake the disinfection of infected houses and infected articles, and to remove the latter for this purpose; while another renders illegal the removal of infectious corpses from hospitals to private houses when this cannot be done with safety; a third gives facilities for the compulsory removal to a mortuary of infectious corpses retained in rooms occupied by other persons; and a fourth prohibits altogether the use of public conveyances other than hearses for the removal of infectious corpses. These clauses contain useful powers, but they will have to be exercised with considerable care and judgment. Medical officers of health are being increasingly trusted by the Legislature and by the public, and before all things they will need discretion in the performance of these new duties which it is proposed to impose upon them.

Annotations.

"Ne quid nimis."

EPIDEMIC INFLUENZA AND THE DEATH-RATE.

THE Registrar-General's weekly returns for the first quarter of this year showed a remarkable general increase in the rate of mortality in our largest towns, for which the meteorological conditions of the quarter do not appear to supply a satisfactory explanation. Speaking generally, temperature is the mainly controlling influence of the death-rate in the first or winter quarter of the year; but the mean temperature of the first three months of this year was unusually high, and considerably exceeded the average in each of those months. Notwithstanding the mildness of the winter, the mean annual death-rate in the twenty-eight large English towns dealt with in the Registrar-General's weekly return was 24·7 per 1000, against 22·0, 22·1, and 20·9 in the preceding three corresponding

quarters; indeed, the death-rate in these towns exceeded that which prevailed in the first quarter of any year since 1882, when the rate was equally high. Since 1882, however, the English death-rate has shown a marked and persistent decline, especially in the largest towns, so that the rate recorded last quarter (24·7) points more strongly to some exceptional influence than did the same rate in 1882. For instance, the rate from the principal zymotic diseases in the first quarter of 1882 was 3·76 per 1000, whereas in the corresponding period of this year it did not exceed 2·04. Excluding, therefore, the rate from these diseases, the rate from all other causes was 22·7 last quarter, against 20·9 in the same three months of 1882. Whether or not it was the influenza epidemic that exercised the maleficent influence upon the death-rate of our largest towns last quarter, it is not without interest to note the varying proportions of the increase in the recorded death-rate in the several towns. Compared with the recorded rate in the first quarter of 1889, which was exceptionally low, the mean rate in the twenty-eight towns last quarter showed an increase equal to 18 per cent.; in London the increase was 21 per cent.; whereas the mean rate of increase in the twenty-seven provincial towns did not exceed 16 per cent. In three of these towns the death-rate last quarter showed an actual decline from the rate in the first quarter of 1889; the decrease being 5 per cent. in Birkenhead, 9 per cent. in Cardiff, and 12 per cent. in Blackburn. The decline in Blackburn, it should be pointed out, was from 32·3 to 28·5, and was more than explained by a marked fall in the zymotic death-rate. In each of the twenty-three other provincial towns under notice the death-rate last quarter showed an increase. The increase was, however, less than 10 per cent. in Oldham, Nottingham, Salford, Preston, Huddersfield, Norwich, Leicester, and Liverpool; it was between 10 and 20 per cent. in Derby, Sunderland, Newcastle-on-Tyne, Plymouth, and Manchester; and between 20 and 30 per cent. in Birmingham, Halifax, Sheffield, Portsmouth, Bolton, Wolverhampton, and Leeds. The highest proportional increases were 30 per cent. in Brighton, 32 per cent. in Bradford, 33 per cent. in Bristol, and 37 per cent. in Hull. It will be impossible to ascertain whether the above-noted ratios of increase bear any constant relation to the varying intensity of the recent influenza epidemic in the several towns until the causes of death in the current year have been classified and carefully analysed. It is obvious, however, that if the general death-rate in England and Wales in the first quarter of this year shows an increase similar in proportion to that recorded in our largest towns, it must have been considerably higher than in the corresponding period of any year since 1886, when exceptionally wintry weather prevailed.

GERMAN CONGRESS OF MEDICINE.

THE annual meeting of the "Congress für innere Medicin" took place this year at Vienna, on April 15th and following days, and it has been resolved that the Congress should meet every alternate year at Wiesbaden, the meetings taking place in other years at Berlin, Leipsic, Munich, and Vienna in turn. The president on this occasion was Professor Nothnagel, who, in his opening address, spoke of the former leaders of the Vienna school—van Swieten, de Haen, Stoll, Peter Frank, von Hildebrandt, and, "later, the energetic, thorough scientist Skoda, the medical artist Oppolzer, the gifted pathfinder Türck, until we come to him whose loss we all still deplore—the cultured, clear-thinking Bamberger." It must, he said, be a good soil which could produce such a series of eminent clinical observers. Attractive as is the subject of the development of medical knowledge and its progress, he was compelled to limit his remarks to the present position of medicine and its relations to science. To notably prolong human life is and always will be an impossibility, since the duration of the individual life is an inherited quality peculiar to each organism, which must cease to act after a certain time. If we exclude the introduction of hygienic measures, and the protection from certain diseases, medicine really did but little for the maintenance of health for generations. But in these latter days, and save for a few exceptions gained by simple and faithful observation of nature, the advances in prophylaxis have all occurred from a more exact application of pathological knowledge. As to treatment, that of old time was based on imperfect knowledge and the observation of external phenomena alone, without reference to the nature of morbid processes. In spite of the increasing knowledge of anatomy, therapeutics at the commencement of this century had not emerged from the old Hippocratic ways, and this is not surprising since no advance had been made in the knowledge of the nature of disease. Indeed, some methods, now recognised as of value, were stumbled on by persons without medical training, whilst many "systems" were advocated without having scientific basis. New paths had to be opened up; medical study had to cease to be merely descriptive and to follow the methods of scientific inquiry if it were to emerge from its stagnation in regard to therapeutics. When physiological and pathological anatomy arose, when chemistry and physics, experimentation and pathological histology, obtained firm footing, then treatment became scientific. It may be that in the pursuit of clinical research the main object of our art has been sometimes lost sight of; but there need be no fear that clinical medicine will not adapt itself to new discoveries or be divorced from pharmacology. For a thousand years medicine sought to deal with external signs alone, untrammelled by scientific knowledge; then it wished to confine nature within "systems" which had been deductively established. There was no advance by either path; men desired to treat without knowing, to influence and control Nature without penetrating her secrets. But since medicine has entered on the path of induction it has been able to record striking practical results. The way of medicine reaches the "possible" only through the "known." The Minister of Instruction, Dr. von Gautsch, greeted the Congress in the name of the Government, and Burgomaster Dr. Prix welcomed it on behalf of the city of Vienna. Professor Billroth spoke for the Society of Physicians; and after the formal business of electing associates and constituting the bureaus, the subject of the Treatment of Empyema was introduced by Professor Immermann of Basle and Dr. Schede, the debate being shared in by Drs. Fraentzel, Curschmann, Hofmokl, and Leyden. At the banquet on the following evening the toasts included "The Health of his Majesty the Emperor Francis Joseph," proposed by the chairman, Professor Nothnagel; Professor Leyden gave "Prosperity to Vienna"; Professor Cantani toasted the Congress; and Professor Mosler the Vienna Faculty of Medicine, in a speech full of memories of his student days in Vienna and the leaders of medicine then reigning in the University—Rokitansky, Skoda, Oppolzer, and Hebra. On the evening of the 17th inst. Professor Nothnagel gave a reception to the members of the Congress.

THE SALE OF POISONS.

A VERY curious anomaly has been noted by Dr. Stevenson, in his official report as the Government visitor on the Pharmaceutical Society's examinations in London. After referring to the number of rejections at the preliminary examination, which render it evident that many imperfectly educated candidates present themselves, he reports upon the large number rejected at the minor examinations through failing in chemistry, pharmacy, and dispensing.

While considering that these examinations are conducted with the greatest fairness, he feels that an important subject is being overlooked. He expresses his conviction that an elementary examination in the statutory requirements as to the sale of scheduled poisons by chemists and druggists is needed. It is not unreasonable to expect that those who alone are allowed to sell poisons retail should know what are the scheduled poisons, and how the register book of the sale of these is required to be kept. When this subject was brought before the Council of the Pharmaceutical Society the President remarked that Dr. Stevenson was probably not aware that it would be necessary for a new by-law to be passed before any fresh subject could be introduced in the examinations. Notwithstanding this difficulty, the question raised by Dr. Stevenson appears of considerable importance, since the examination to which he refers qualifies persons for the sale of poisons. Frequent objections are made to the schedule of poisons as being far too restricted in nature, but it has always been assumed that those qualified to dispense poisons are necessarily familiar with their legal responsibilities. If this is not so, it is certainly high time that by-laws should be introduced to correct such an obvious oversight and danger.

"THE PIGWASH TUB."

AT the beginning of the London season a word may be said on this subject, which has been under our observation for some years. Carts with one or two horses may be seen any morning in all the fashionable parts of town collecting for the pigs. The contributions consist apparently of all the good food that John Thomas or Mary Jane can manage to spoil superficially—half loaves, perhaps slightly soiled outside, large pieces of meat, vegetables without number. The pigwash man takes great care of them, and sorts them elaborately. We know, on the other hand, how difficult it is to get from many large houses the gift of the broken meat for a poor family. The master or mistress may give orders, but the applicants are told there is nothing, or are given a crust or two. Of course, the "broken victuals" are the perquisite of the cook, and she takes care to "break" as much as possible. We read in the Gospels of the prodigal son, who "was fain to fill his belly with the husks that the swine did eat," but nowadays he would not need to be very hungry to make an excellent dinner out of the contents of the "pigwash tub." Things have changed, and John Thomas and Mary Jane have learnt a thing or two since then. "John P. Robinson, he—Says they didn't know *everything* down in Judee." The broken victuals are the greatest boon to many charitable institutions who regularly collect them.

TUBERCULOSIS BY INOCULATION.

A FAIR number of cases are now on record in which tuberculosis has been caused by accidental inoculation. Thus, many "post-mortem warts" have been proved to contain tubercle bacilli, and a case occurred some time ago in Vienna of a porter who pricked his finger whilst sewing up the body of a patient who had died from phthisis, and upon whom an autopsy had been performed; tubercular nodules appeared on the porter's arm, which on microscopical examination exhibited tubercle bacilli, and he eventually died of miliary tuberculosis. Another case of accidental inoculation is reported by Dr. Deneke of Hamburg in the *Deutsche Medicinische Wochenschrift* of March 27th of this year. A child, aged seven months, accidentally fell, its head striking and breaking a chamber utensil, into which the mother was accustomed to expectorate. The mother, aged twenty-five, was found to be suffering from phthisis of the left apex, and tubercle bacilli were found in her sputum. The child on being taken up was found to have received three superficial cuts on the head; these were carefully cleansed with corrosive sublimate solution, and dressed at first with iodoform, and later with corrosive sublimate compresses. The wounds healed in a week. Six weeks later the child was again brought to Dr. Deneke, who found that two of the scars were swollen and congested, and there was also a painful swelling in the region of the left parotid. The two wounds on the head gradually broke down, and small ulcers formed. An abscess formed behind the left ear, starting from an enlarged gland; in the discharge from this abscess tubercle bacilli were found. The child improved temporarily, but soon became worse again, and died four months later. At the post-mortem examination caseous glands were found in the neck, in addition to the abscess above mentioned. The bronchial glands were healthy, and only one of the mesenteric glands showed caseous change. Two tuberculous nodules were found in the spleen, but otherwise no signs of tubercle were found anywhere in the body; the lungs were healthy. This is an interesting case of tubercular inoculation. It is quite analogous to those cases in which infection has been received from broken spittoons, although it differs from these in that tuberculosis did not become general.

THE DISPOSAL OF SEWAGE BY SMALL TOWNS AND VILLAGES.

IN the current number of the *Journal of the Royal Agricultural Society* is a short article by Mr. Clare Sewell Read which it is to be hoped that all sanitarians will study. Mr. Read, as a practical agriculturist of the highest standing, gives the *coup de grâce* to sewage farming as a profitable industry. "Sewage," says Mr. Read, "has come to be regarded by all sensible people simply as a nuisance to be got rid of." Sewage farming, from Mr. Read's point of view, is of service only for cleansing the sewage; agriculturally it is a failure. Rye grass is the only crop to which sewage can be applied with any likelihood of success; and rye grass, from the grazier's point of view, takes low rank as a nutritious herbage. "To grain of all kinds the flow of sewage invariably does much more harm than good." "It is the curse of most sewage farms that they have to deal with the largest volume of sewage when they want it least; but should the amount of sewage be in itself small, when it is most wanted there is scarcely any to be had. It is, therefore, found that osiers or ash-poles, which require little attention and grow away whether the beds are flooded a foot deep or the sewage trickles down the carriers in intermittent driblets, are the best crops for sewage beds." Mr. Read quotes many examples of the successful clarifying of village sewage by means of osier or ash beds; but as osiers fetch a very poor price, the return to the sanitary authority is not worth considering. Mr. Read instances the example of six villages in Brixworth Union, Northamptonshire, which, having a population collectively of 4888, have been sewered at a cost of £4442, the sewage being clarified by filtrations through five acres and a half of ash and osier beds. Whissendine, in Rutland, with a population of 734, has been sewered at a cost of £1000; and Ashwell, in the same county, with a population of 200, has been sewered at a cost of £492. This latter, we take it, is a very good example of the costliness of providing sewers for small villages, and there can be little doubt that the daily collection of excrement, with or without the addition of earth, and its immediate burial just below the surface, is for such villages the best method to pursue. The one advantage of water carriage is (theoretically) the *immediate* removal of filth from the dwelling, and those who make a daily removal of filth, even though wheelbarrow, shovel, and broom be used instead of a water pipe, are doing all

that is possible. Mr. Read is quite alive to the drawbacks of sewering country villages. "For cottages the dry-earth closet seems the most rational way of dealing with fæcal matter, and the house slops can be easily emptied into a hole in the garden. ..... But earth-closets must be under constant supervision, and all slops must be rigorously excluded, or the closets soon become extremely filthy. Where the cottages in a village mainly belong to one proprietor, it answers well to have a man employed to remove *once or twice a week* [the italics are our own] the contents of the closet and supply fresh earth; and if the sanitary authority favour the dry-earth system, there is no reason why they should not contract or employ an officer for its superintendence and scavenging in the same way that they now pay for flushing and inspecting the sewers within their district." We have italicised certain words in the above quotation, because we feel sure that closets should be emptied every day, and we feel sure that the ease with which closets are managed is in proportion to the frequency with which the contents of them are removed. A village community of 200 persons live probably in forty houses, and provide at the very outside 200 lb. weight of excrement per diem—an amount which an old superannuated man could collect in a couple of hours in one ordinary wheelbarrow and bury in the nearest field. If this labour were paid for at the rate of the "docker's tanner" (double the rate of agricultural labour), it would amount to seven shillings a week. Mr. Read of course knows that, although "sewage" is a nuisance pure and simple, human excrement is a manure of the highest value, provided the farmer can control the time and the amount to be applied. Mr. James Caird tells us (in another article in the journal of the Society) that we are importing £140,000,000 worth of foreign food annually. The cake with which farm stock is fed is given not only to fatten the stock, but with a view also to enriching the land. When farmers turn their attention to the nitrogen and phosphates contained in £140,000,000 of human food so much the better for agricultural interests. A nation which imports food and manure, and uses its excrement merely for fouling its rivers and its coasts, is living on capital. All who are interested in the land—owners, tithe-owners, and cultivators—should attend to this. It is a national question of the highest importance.

ROARING IN HORSES.

IN the *Veterinary Record* of April 19th, a paper on Laryngeal Operations and their Results is published, which was read before the Central Veterinary Medical Association by Mr. Dollar. In it he discussed the operations which have been devised for the cure of roaring, and gave a tabular statement of 71 performed on army horses in accordance with the method proposed by, and probably many of them under the direct supervision of, Dr. Fleming. The table is in some particulars defective, and on one point we certainly would desire further information. Mr. Dollar says: "You will see that of the entire 71 Dr. Fleming claims to have cured 27. On Jan. 16th, six weeks after his statement, I found that 17 horses were still capable of duty, but to-day, ten weeks later, I am unable to tell you how many of that 17 are left." We should like to know under what circumstances Dr. Fleming's statement was made, and the means which Mr. Dollar had of ascertaining, six weeks after it, how many of the horses were really fit for duty. We have carefully analysed the return with the following results. Between May 1st, 1888, and March 5th, 1889, the operation was performed on 71 horses. Of these, 2 subsequently died of diseases having no connexion with the operation, 1 from enteritis, and the other from injury to a hind limb. Deducting these, 69 horses remain in the return—the date at which it was made up is not stated, but it must have been subsequent to October, 1889. Of these 69 cases, the "results as stated by Dr. Fleming on oath" were—11 at duty, without any remark as to the effect of the operation; 27 cured, exclusive of these 11; 19 sold by auction, 10 were destroyed, and 2 died. Of the 27 reported "cured," 14 were at duty at the date of the return, 9 had been sold by auction at different dates, all of them stated to be incurable "as shown by official returns"; 2 were under treatment at Woolwich, and of 2 no specific information is given. Of the 19 sold 15 were returned as "incurable," and of 4 no information is given, nor is anything stated respecting 7 out of the 10 destroyed. Of the two deaths, one was caused by strangulation (but no details are given), and the other from suffocation, stated to have been the result of an operation for roaring performed eight months previously. Mr. Dollar remarks that "To an outside observer it seems only too evident that the Army operation is not a success—to those within the pale it must always have been apparent." We are not quite prepared to admit this. Of 69 horses operated on, 25 were actually at duty when the return was made. We desire further information as to its effects before coming to the conclusion that it is either useless or unjustifiable. We look forward to Dr. Fleming's annual report to furnish us with more details respecting the condition of the horses which have undergone the operation, the causes of its failure in many cases, and the improvement in the treatment which may be suggested by the results of past experience.

PROFESSOR MASSON ON THE PROFESSIONS.

ADDRESSING the newly admitted graduates of the University of Edinburgh last week, Professor Masson indicated how in each of the faculties—divinity, medicine, and law—there is an increasing preponderance of the supply over the demand; how as offshoots of these professions there have arisen three new ones, those of teaching, of journalism, and of applied science; and how universities will have to take immediate cognisance of these latter, and so modify their professional curricula as to afford the intending schoolmaster, publicist, or industrial expert the same means of qualifying for his life work as that hitherto available for the aspirant to one or other of the traditional callings. It is true that the teaching profession has derived its most effective recruits from those of the theological faculty, who, from some motive or other, have fallen away from the career they originally contemplated; that journalism has drawn its ablest representatives from academically qualified though unemployed barristers, while, by an easy transition, the medical student, whose preliminary training implies a sound knowledge of chemistry and even physics, has often, in the lack of a professional outlet, had to turn his acquirements in general science to such account as the multifarious demands of modern industry make most profitable to him. But competition in each of these new professions has necessitated more elaborate preparation on the part of the competitor, and Universities, as the qualifying bodies of every learned calling old or new, must adapt themselves to the ever-increasing wants of civilisation. It is too much to expect the professorial staff already engaged in disciplining effective recruits for the older professions to undertake the task of preparing candidates for the new, and so a considerable share of their work will have to devolve on supplementary coadjutors in order that, by division of labour, a more efficient academic product may be turned out. The existing teaching staff will thus be relieved of that "excess of auditory" which, north of the Tweed especially, has long been recognised as an evil to be remedied. Without hazarding any concrete proposal, Professor Masson clearly shows that University extension is a problem more than ripe for the legislator; while of all

the professions that would benefit by a more direct, more "personal" contact, so to speak, between teacher and student than is possible in the overcrowded class-rooms of the Scottish Universities, none has more to gain from such an improved system than the medical, in which theoretical exposition is every day yielding ground to practical demonstration, and in which, as all history and experience of the practitioner's art teaches, the more the disciple is brought face to face with the master, the more likely is he to perfect himself in that special relation he is one day to assume to his suffering fellow-man.

CONTRACTION OF THE TONGUE IN HYSTERIA.

DR. CARL LAUFENAUER mentions in a Hungarian medical journal the case of a patient with hysterical torticollis complicated with a peculiar ataxy of the tongue, the intensity of which increased and decreased with the neuromuscular excitability of the throat, a proof of the peripheral origin of the ataxy. Another patient, who had hystero-epilepsy, immediately on protruding her tongue contracted it to such a degree as to be unable to put it back, suffering severe dyspnœa until the contraction was spontaneously relieved. Occasionally this patient's tongue remained motionless in her mouth for from three to five days. He mentions also two cases in which hypnotism was employed. A servant girl suffering from hystero-epilepsy presented under hypnosis as well as in the waking state the following symptoms: A König's tuning-fork "sol" held before the right ear caused the protruded tongue to deviate to the right, to remain contracted from fifty-five to eighty seconds, to become swollen and hard, and to appear cyanotic. Both eyes were turned in the same direction. Similar results were obtained on the left side. When the tuning-fork was held under the chin a broadening of the tongue took place, the tip pointing downwards. When the fork was held over the top of the head, the tongue was drawn back into the mouth, with the tip against the hard palate. It was not only possible to produce this reflex action of the glosso-pharyngeus, but the muscle could also be excited directly by means of a small probe. In this case, however, the eyes would not act with the tongue. Another servant girl, suffering from hystero-epilepsy, presented the same symptoms, with the addition, however, of uniform contraction of all the muscles of the throat and head, the latter, of course, moving correspondingly. When the tuning-fork was made to revolve round its own axis the tongue not only followed in the same direction, but remained contracted in this position, a condition which could not possibly be imitated by a healthy person.

SPECIALISM IN NURSING.

SOME perhaps have imagined that the education of nurses is by this time too well understood to admit of much further development or modification. That there still is room, however, at least for differences of opinion on the subject is apparent from the animated discussion which followed a paper on "Division of Labour in Nursing," read by Mr. Warrington Haward before the British Nurses' Association on the 18th inst. The author is to be congratulated on his reluctance to multiply distinctions in this field of work. Medicine has suffered much from the schisms wrought in it by excessive specialism, but this applies to practice rather than training. "All round" is now, as formerly, the fundamental maxim of professional instruction. First the general, then, if desired, the special. The position of nurses is in this respect very similar. To train them according to any exclusive rule would simply mar their usefulness even in what would then be their meagre total of proficiency. Special needs exist, no doubt—as, for example, in the nursing of certain major operation cases; and special aptitude must be acquired by any nurse who may be called upon to deal with them. Any such aptitude, however, can only be intelligent if it is founded on a correct understanding of general principles. It is most important also that this necessary basis, no less than any particular after-development, should be firmly established by practical experience. At this point we may profitably discuss the question of out-visiting by hospital nurses. A speaker at the meeting above mentioned objected strongly to this course, unless the nurse employed had been already thoroughly trained. The objection is perfectly intelligible, though it must be remembered also that out-nursing is really a most useful supplement to the experience already gained in a hospital ward. Its educational value is one of its chief advantages, since it is amid the emergencies and inconveniences of private practice that a nurse will acquire much needed habits of readiness and decision. There is no reason, indeed, why a senior probationer under due supervision (as in the case of advanced medical students) should not learn and accomplish much if allowed a reasonable degree of liberty in this department of her calling.

THE FASTING MAN.

THERE is a degree of scientific interest about such experiments as the fast which is now approaching its close at the Aquarium. It is no doubt instructive to note the decline or the disturbance of physical processes which marks the steady ebb of a starved life. Interest, however, and that of a kind allied to curiosity, is almost, if not quite, the only gain. There is little or no practical utility in such observations, since the results attainable by them, unless we except that of merely registering the limit of human endurance, are and have been arrived at by investigations carried out on the lower animals. We candidly confess, therefore, that such exhibitions as this appear to us, even on physiological grounds, to be needless and unadvisable. The risk of a fatal issue, or of permanent injury to health, is too serious to be lightly undertaken. When we find it, as in the present case, wilfully encountered for the entertainment of a general assemblage of sightseers, and for the mere sake of gain, we hardly know which is the more blameworthy, the wanton sufferer or the callous onlookers who countenance his folly. It is time that we saw the last of this dangerous pastime, which will soon, we hope, have found its true place among the discarded eccentricities of a depraved public taste.

A CASE OF SPORADIC CRETINISM.

A CASE of this interesting disease is described under the name of "idiotie myxœdemateuse" in the current number of the *Archives de Neurologie* by M. Bourneville. The patient, who is now twenty-five years of age, is the youngest of five. None of the others are cretins, but several have died of tuberculosis. The parents were not related and the mother was quite healthy, but the father died of phthisis. Until three years of age the patient is said to have talked, walked, and played just like other children; but at this time he stopped growing and became fat and puffy. On his admission to the Bicêtre his height was only thirty-five inches and a half, and his weight fifty-four pounds. His head was bossy, with projecting occipital region, and his anterior fontanelle was not quite closed. His forehead was low, narrow, and compressed laterally. There was the usual thickening of the eyelids, so that they could scarcely be raised at all. The teeth were irregular in position, and the temporary canines and premolars had not been shed either in the upper or lower jaw. There were the usual masses of fat seen on each side of the neck, and no thyroid gland could be

detected. There was general thickening of the skin, and very great development of adipose tissue in front of the abdomen and in the gluteal regions. The genital organs were those of a young boy; there was no tendency to masturbation. The patient was able to feed himself, although slowly. He was unable to read and write, and his language was confined to a few monosyllables. If he used a longer word, he pronounced only the last syllable. He was fond of sewing, which he did fairly well, but he was quite unable to dress or undress himself. He was fond of smoking, and apparently affectionate, but usually appeared indifferent to surrounding circumstances. The case is of interest in the late development of the symptoms. In a case shown at the Clinical Society by Dr. Abercrombie, myxœdema was set up at the early age of eight, after some obscure acute illness, which he suggested might possibly have been an acute inflammation of the thyroid gland, leading to its atrophy. The information as to the onset in this case was not complete, as the parents could not be questioned, but it is just possible that this may have had some similar origin.

THE QUESTION OF A HEALTH OFFICER FOR CUMBERLAND.

THE question of the appointment of a medical officer of health for Cumberland is being discussed in the local press, and it is suggested that the county would do well to follow the example of other counties that have already either appointed, or decided to appoint, such an officer. Incidentally the influence of the late Dr. David Page, when holding the post of medical officer of health over a combination of Westmoreland sanitary districts, is referred to as indicating the value of the advice of a skilled officer having cognisance of the requirements of a large area, and being able to compare locality with locality as regards their detailed administration. The effect of such action is spoken of as having lowered the mortality of the districts in question, as having served to prevent the spread of epidemic disease, and as having attained the object of enabling an expert to devote his time and talents to the study of those measures which tend to promote public health. The points to which prominence is thus given have an application beyond the limits of the counties of Cumberland and Westmoreland.

THE LOCAL GOVERNMENT BOARD AND THE SANITARY STATE OF WINDSOR DISTRICT.

ON August 15th, 1885, we published a Special Report on the Sanitary Condition of Windsor which excited much indignation in the neighbourhood. We were accused of exaggeration. Indignation meetings were held, deputations were sent to the Local Government Board, and copies of THE LANCET were publicly burnt. Altogether, we brought down upon ourselves and one or two persons who had helped us to procure information that amount of contumely and unpopularity which generally rewards those who succeed in exposing a genuine grievance. The local authorities sought to shield themselves first by effecting a few remedies, and then by asking the Local Government Board to report on the condition of the borough. As it was easy to prove that the ameliorations had been carried out after the publication of our report, the fact that some of the evils we had denounced no longer existed did not in any way invalidate the accuracy of our statements. Indeed, the Report of the Local Government Board confirmed what we had previously insisted upon. The general press had energetically supported us in our efforts, and now the Local Government Board has added the weight of its official opinion to our strictures. In the able report drawn up for the Government by Dr. Hubert Airy and Mr. Arnold Taylor, very clear indications were given as to what measures could and should be taken at Windsor. A certain time was allowed to elapse, and now these gentlemen have drawn up a second report, which has just been published. In their first report the appointment of a nuisance inspector had been recommended. This has been done, and Mr. Mellows, the Inspector of Nuisances chosen, entered upon his functions in 1888. He has made a house-to-house visitation, which has disclosed the fact that a considerable portion of the better class property is also in a bad condition. The three other recommendations made by the Local Government Board inspectors do not, however, seem to have been carried out. There is still no provision for the isolation of cases of infectious disease and for the disinfection of infected articles, nor has a refuse destroyer been provided. In regard to the unwholesome dwellings of the poor of Windsor, on which we had particularly insisted, the remedies attempted are mere patchwork measures. Here and there some few additional closets have been built, and one or two very bad houses are now pulled down; but, in the second official report just issued, it is plainly stated that the Mayor of Windsor and the officials at the Town Hall seem disposed to underrate the powers every local authority possesses, and the text of the law is quoted, for their instruction, showing how certain specified houses could be removed on the plea that they are "obstructive buildings." The report describes in detail the various courts and alleys where improvements were declared to be necessary, and shows that these improvements have not been thoroughly carried out. In fact, even at this late hour, there is much neglect; and so clearly is this the case that the Local Government Board has been obliged to issue the second report, just published, with the evident intention of trying to rouse the authorities who are responsible for sanitary administration in the ancient and Royal borough of Windsor.

COLONIAL MEDICAL APPOINTMENTS.

WE would remind any of our readers who are intending to apply for Government appointments in the tropical colonies that applications should be addressed to the Private Secretary, Colonial Office, Downing-street, S.W., before the end of the present month, as during April in each year a list of candidates is prepared from which the appointments of the next twelve months are made. An account of these appointments will be found in THE LANCET, April 21st, 1888, p. 795, or may be obtained by application at the Colonial Office.

GONORRHŒA AS A CAUSE OF SALPINGITIS.

DR. SCHMITT communicates to the *Archiv für Gynæcologie* an instructive case of gonorrhœa in a woman. The first symptoms were observed in the urethra and uterus, the discharge containing gonococci; then followed pains, frequent paroxysms of fever and emaciation to such an extent that after several weeks the removal of the left tube, which was considerably thickened, seemed indicated. The operation, which consisted in salpingectomy and left ovariotomy, was difficult because of the existence of extensive adhesions, so that pus entered the abdominal cavity, and the serous covering of the gut was torn in one place. Death occurred on the second day, and was found at the post-mortem examination to have been caused by peritonitis from perforation of the bowel. Both tubes were thickened, enlarged, and full of pus containing gonococci, and the microscopic appearances were similar to those found in gonorrhœa when recovery is taking place. Some of the morbid changes could be explained by increased pressure, due to the retention of pus. The tissues of the tubes contained no gonococci, which fact was probably due to the progress which had been made towards cure. The author

was induced by this case to undertake a series of clinical examinations of the disease, and in 116 cases of acute or subacute gonorrhœa in women, he found twenty-seven complicated with secondary disease of the pelvic organs, four being also syphilitic. In most of these cases the gonorrhœa had extended to the mucous membrane of the whole of the genital organs during the first two months after infection. He believes that gonorrhœal perimetritis is caused by the admission, through the abdominal orifice of the tube, of pus, which acts chemically, and not through the gonococci it contains.

THE INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA, 1889.

THE Transactions of the second session of the above Congress, held at Melbourne in January, 1889, have been published. They form a bulky volume of upwards of a thousand pages. There were eleven sections—Medicine, Surgery, Hygiene, Forensic and State Medicine, Anatomy and Physiology, Pathology, Obstetrics and Gynæcology, Diseases of the Eye, Ear, and Throat, Psychological Medicine, Pharmacology, Diseases of the Skin, and Diseases of Children. Amongst the subjects more particularly discussed were Typhoid Fever, Hydatid Disease, and Diphtheria; whilst the papers contributed embraced a vast variety of subjects of practical interest and importance. As we shall have another opportunity of referring more in detail to this volume, we must be content now with the remark that it bears striking evidence of the zeal with which medicine is studied and practised at the Antipodes.

MEASLES AND RÖTHELN.

SINCE the introduction of the term "rötheln," or German measles, notwithstanding the numerous descriptions of epidemics, and the careful tabulation of the symptoms and signs in which it differs from measles and scarlet fever, there has been frequent evidence that the condition described is not universally recognised as a distinct disease. In an instructive article in the *Archives of Pediatrics* Dr. C. W. Townsend of Boston once more reopens the question. He describes seventy-six cases of measles he attended during an epidemic, and his observations upon the duration of the incubation and prodromal stage are valuable. Considering the relation of his cases to rötheln, however, he becomes somewhat sceptical of the existence of the latter disease. "Given a mild case of measles, where the eruption is not abundant, where the catarrhal symptoms are slight, and where the prodromal stage is at the same time short or absent, and we have a picture of disease exactly like that described as rötheln." The relative difficulty in founding a diagnosis of rötheln on a single case, and the assumption of rötheln when the individual has previously had measles or scarlet fever, the points upon which stress is laid by Strümpell, certainly seem insufficient. The swelling of the glands in the neck and soreness of the throat, which are mostly said to be diagnostic of rötheln, were present in some of Dr. Townsend's cases. Writing with a full knowledge of Dr. C. Haig Brown's account of successive epidemics of rötheln and measles at Charterhouse School, still, after carefully weighing the evidence in the light of his own experience, Dr. Townsend arrives at the following conclusions. Epidemics of measles occur in which many of the cases exactly resemble cases described as rötheln. These cases are also found occasionally in severe epidemics of measles. Glandular swellings and sore-throat are sometimes found in cases of undoubted measles, and are sometimes absent in cases called rötheln. The symptomatology of rötheln is not distinct from that of measles. It is, therefore, impossible to make a diagnosis of rötheln from a single case. The only ground on which the individuality of rötheln rests is the fact that previous attacks of measles afford no protection from this disease. As second attacks of measles do occasionally occur, we cannot, he thinks, make the diagnosis of rötheln unless we meet with a series of cases in patients, many, or most of whom, have previously had measles. Finally he asks, "Is it possible that in some epidemics and not in others a mild form of measles attacks equally those who have had measles before and those who have not, and affords no protection from measles? In other words, is rötheln merely a mild form of measles?"

METROPOLITAN ASYLUMS BOARD.

THIS Board, under the presidency of Sir Edwin Galsworthy, met on the 19th inst. at the offices of the London School Board. The report of the Statistical Committee recommended that application for the amendment of the Infectious Diseases Notification Act of last session, to meet the special requirements of the metropolis, should be made to the Local Government Board. The chairman read a letter from the London School Board on the subject of this Bill, in which it was stated that the School Board had made application to the local authorities to be supplied with the notifications of infectious diseases. Many of the authorities had courteously given the information; but as the Board required information for all London, application was made to the Asylums Board to furnish to them the information which all the local authorities were compelled to supply. The chairman moved that the Local Government Board should be asked to assent to this request if it was considered expedient and desirable, and this resolution was approved by the meeting.

THE BUDGET AND "THE RUSH TO ALCOHOL."

NO one will think the worse of Mr. Goschen for not foreseeing that the drinkers of alcohol would give him such a large proportion of the splendid surplus of which he found himself possessed at the end of the financial year. Charity thinketh no evil, and for Mr. Goschen deliberately a year ago to have anticipated that his fellow countrymen, who had been making great advances in temperance for ten or twelve years, would use their increased incomes in the increased consumption of spirits, especially rum, beer, and wine, would have been a decided breach of charity. But it is even so. We are particularly humbled. It is our business to defend alcohol from the intemperate attacks of teetotallers, knowing well that it is often most useful, if not indispensable. But it is also our business constantly to point out that an enormous amount of disease is produced by it leading to misery, pauperism, and death. We almost hoped that it was a matter of common acceptance and intelligence that all casual drinking, drinking for its own sake, and except as a part of a meal, was thoroughly bad. But we have no escape now from the conclusion that the higher wages of a period of prosperity have been used, not in the consumption of articles of use to the whole of a man's family, but in the increase of his beer, his rum and other spirits. There is a selfishness about this use of high wages, as well as a pathological significance, which, as Mr. Goschen says, we must deplore. We cannot doubt that if this aspect of the use of higher wages could once be realised by the British workman he would be ashamed of it. The nation owes a debt of gratitude to Mr. Goschen for the exposure of the truth in this matter, and for his attempt to direct public attention to the deep alcoholic tendencies of the people and the means for their restraint. As to the rest of the Budget it has little special interest for us. We may, perhaps, have some cause to complain that the payers of

income-tax have not been relieved to some extent out of the surplus. The income of medical men is hardly made, it has many demands on it when made, and, more than is the case with most modest incomes, it is precarious. For such men to be, except of necessity and for a time, saddled with a sixpenny income-tax is unreasonable. But we have no choice but to submit, and to hope that Mr. Goschen will have another opportunity of redressing this great injustice and lightening this heavy load.

SURGICAL TREATMENT OF HÆMORRHOIDS.

DR. TRZEBICKY of Cracow publishes in the *Przeglad Lekarski* the paper on the surgical treatment of hæmorrhoids which he read before the Surgical Congress held at Cracow. He himself had performed 121 operations after Langenbeck's method with but one unsuccessful case, in which the want of success had nothing whatever to do with the method of operation. It is interesting to note that Hippocrates recommended the application of the actual cautery in hæmorrhoids. Dr. Trzebicky gives a history of the various surgical and other remedies formerly and sometimes now recommended for the cure of hæmorrhoids, showing at the same time their invariably insufficient success and other objections to the different methods of treatment. He mentions the ligature as being particularly favoured in England; but, he says, bad results have frequently followed, and it is occasionally very painful. Carbolic acid injections, which frequently have to be repeated after some weeks, are mentioned as giving very good results, but he much prefers the actual cautery, and remarks that Mr. Smith lost only one out of 430 cases operated on by this method, while Dr. Langenbeck himself never had a single complication. Of the various modifications of the method, that by Dr. Langenbeck guards best against after-bleeding and stenosis, and is equally adapted to all varieties in the size and shape of the hæmorrhoids. After describing the details of the modified method, he says that the only complication which has ever been observed after the operation is reflex contraction of the sphincter of the bladder during the first few days, which generally occurs after any operation in this region. The operation is contra-indicated only in inflammation of the hæmorrhoids and surrounding parts, or when pus is present. Regarding the author's own 121 cases, in one case only, twenty-seven hours after operation, while everything was going on well, paralysis of the heart occurred; of complications he had one case of pyæmia ending favourably, and one case of slight secondary hæmorrhage, which was easily arrested.

THE CHARITABLE BEQUESTS OF ENGLISHMEN.

THE newspapers do a kind and useful work in giving a prominent place to charitable bequests. The *Standard* of the 11th inst. devotes a column and a half of bold type to a special article headed "Fifteen Months' Charitable Bequests," which contains some statements that should arrest the attention of men who are likely to have money to leave. It is a somewhat melancholy thing to see a great accumulation of money left away altogether from charitable purposes. Our contemporary says that most of the great estates under which bequests are made in England are those of persons without children, except among the Jews, with whom it is customary to leave legacies, though not of large sums, to the benevolent institutions of their community. It is not satisfactory that there should be this difference between Jews and Christians. And it is certainly not discreditable to the Jews. Admitting a man's primary obligation to his children, it is obvious that where a large sum has to be divided he can without hurting them afford to recognise the claims of the community of which he is a member by a gift in aid of those who have been unprosperous or unfortunate or afflicted. Such a use of money in society is little short of a primary obligation. Only about one will in seven noticed in the newspapers makes bequests to charities; charitable bequests amount to about two per cent. of personalty reported. It is estimated by the writer of the article referred to that, taking the bequests under wills not reported in the newspapers at £500,000, and those bequests so reported, the sum total left to religious, educational, and charitable institutions in England in a year amounts to about £1,500,000. As to the grooves in which such bequests run, the most serious remark made is as to the comparative neglect by charitable testators of the great General Hospitals of London. Even to the London Hospital, whose claims appear so strong, the legacies of last year appeared to be under £1000. Special hospitals fare better, apparently because of their greater importunity. In the provinces the special hospitals are supported, but not to the detriment of general hospitals. We earnestly commend to wealthy men who wish to secure the good use of their money in perpetuity the claims of our great general hospitals, where special skill is found in connexion with large general experience.

PRIMARY CANCER OF THE LIVER.

DR. HANSEMANN, of the Pathological Institute of Berlin, points out (*Berliner Klinische Wochenschrift*, No. 16) that the occurrence of primary cancer of the liver is not so frequent as is often admitted; that in many cases the primary source of the hepatic disease has been overlooked. Leichtenstern, he says, from records embracing the period between 1845 and 1872, gives seventy-two instances of primary to 358 of secondary cancer. Hansemann himself, in the Berlin records from 1870 to 1889, finds among the 258 cases of hepatic cancer thence compiled twenty-five of primary cancer of gall-bladder, two of primary cancer of larger bile-ducts, and only six of true primary cancer of liver, and two of these are doubtful. He gives details of a case in a woman twenty-five years of age, in whom the organ was enormously enlarged and the seat of multiple new growths of two distinct types: adenomatous and carcinomatous. He shows, however, that in literature two distinct types of hepatic adenoma have been described; one in which the structure of the bile capillaries is reproduced, and the other in which the cells are larger and the tubules resemble those of the tubuli contorti of the kidney. Schüppel was of opinion that such adenomata could become converted into carcinoma, as would appear to have been the case in the instance recorded by Hansemann. One must admit, however, a form of "malignant" adenoma, for there are cases in which there have been metastatic deposits, the tumour penetrating the veins. Besides this adenomatous type there are two other forms of primary hepatic cancer. One is in the form of large solitary masses, from which secondary deposits form in the vicinity of the organ. The other and less rare type is the infiltrated form, which to a certain extent simulates cirrhosis. Both these conditions arise in the hepatic cells.

INOCULATION OF ERYSIPELAS IN DIPHTHERIA.

THE *Internationale Klinische Rundschau* publishes a lengthy article on the treatment of diphtheria by inoculation with the virus of erysipelas, as practised by Dr. Babchinski of Kieff. His own son had been suffering from gangrenous diphtheria, and the case seemed hopeless. The diphtheritic process extended to the nares, and the boy scratched himself until ulceration resulted. Erysipelas supervened round the ulcer and made the prognosis, if possible, still worse. Suddenly, however, the boy became better, and ultimately recovered. Dr. Babchinski subsequently met with similar

cases; and, concluding that erysipelas is antagonistic to diphtheria, he began to inoculate patients suffering from the latter with the bacteria of the former disease. The inoculation succeeded nearly always, and was performed by means of punctures in the submaxillary region. Of fourteen inoculated patients two died before the development of the erysipelas, but all others recovered. The patients took no medicine whatever, but the houses in which they lived were carefully disinfected. In every case in which erysipelas supervened spontaneously on diphtheria, the latter disease was mild and the erysipelas was not of a dangerous character.

LEAD IN DRINKING WATER.

THE occurrence of lead in drinking water is not so rare a thing as is generally supposed. The symptoms of chronic lead poisoning are, however, so characteristic that a moment's consideration will soon indicate the possible source of the evil, and in many cases the examination of the water used for drinking purposes will probably settle the question A simple method for the rapid and easy detection of lead in potable water, and within the reach of the medical officer of health and others generally, will be welcomed. Such a method is that which was introduced to the notice of the Society of Public Analysts, at their meeting last month, by Mr. Sidney Harvey. It depends upon the fact that the treatment of lead salts with bichromate of potassium results in the formation of the remarkably insoluble yellow chromate of lead. The following is the *modus operandi* directed. Two grains of crystallised bichromate of potassium are added to half a litre of the suspected water contained in a conical precipitating glass, and after stirring allowed to remain at rest for fifteen minutes or so. Side by side with this, for the sake of comparison, is placed a similar vessel containing lead-free water, to which bichromate has also been added. If the water, so the author affirms, contains as little as one-fiftieth of a grain of lead per gallon, it will become sensibly turbid, and in about twelve hours the precipitate will so subside that the water may be poured off nearly to the last drop. The blackening produced when sulphuretted hydrogen is added to water containing lead is, of course, well known as a test; but this might possibly be due to copper or tin, both of which give the same effect. No other metal likely to be present in water is said to give any reaction with bichromate of potassium. If the water is not clear, obviously filtration must be first resorted to. As a rule, lead is commonly found in very soft water as hydrated oxide, or in soft water containing much carbonic acid gas as carbonate, but scarcely ever, if at all, in water containing sulphate or silicate.

A CASE OF HYSTERIA FOLLOWING TYPHOID FEVER.

PROFESSOR GRASSET of Montpellier has recently recorded a well-marked instance of this condition occurring in a girl twenty-three years of age, who until then had shown no signs of hysteria. She had passed through a mild attack of typhoid fever and was convalescent, and allowed to get up daily, when she was suddenly attacked with complete paraplegia. This was considered to be "hysterical" in character because of the coexistence of the following symptoms: a number of persistent stigmata, incomplete left hemianæsthesia, absence of the pharyngeal reflex, and contraction of both fields of vision. A month later complete aphonia was developed. The diagnosis of hysteria was verified a few days later by the patient suddenly recovering her voice and the power over her legs, so that in a few days she was able to leave the hospital in perfect health. A similar case is quoted from Trousseau. A patient of his, twelve years old, was attacked with paraplegia during convalescence from typhoid fever, and all treatment was without benefit, until one day she was accidentally locked in her bedroom. When the nurse returned she found the patient standing at the door, having walked without much difficulty from her bed to try to open it. In neither of these cases had there previously been any tendency to hysteria.

BENEVOLENCE OR BUSINESS IN THE PROMOTION OF HOSPITALS.

AN evening contemporary comments with not undue severity on a proposal to publish abroad the virtues of Shanklin as a health resort, emanating from a public meeting of the inhabitants. The most brilliant idea of the evening was to the effect "that the best way to keep Shanklin going was to start a children's hospital; the best way to increase the growth of Shanklin was to get in with the great physicians!" It was unanimously resolved to form a committee, having for its object the formation of a hospital. Many hospitals have had no better beginning than the proposed good of some person or place. But there is here a delightful openness of admission that the object of the promoters is the benefit of Shanklin, and that the benefit of children is a mere means to an end.

TRACHEOTOMY IN BRUSSELS.

La Clinique publishes an account of 101 tracheotomies which have been performed for croup in the St. Pierre Hôpital during the four years ending Dec. 31st, 1889. The number of recoveries was twenty-eight. Of the 16 cases under the age of two years only one recovered. In most of the fatal cases the false membranes extended along the bronchi to the smaller branches, death usually occurring on the third or fourth day. The tube was generally removed about the fourth day for a few hours in the cases that were doing well, and after a few more days it was dispensed with altogether. Local antiseptics were always used—nasal injections, painting the throat, and spray. Generally chloroform was administered, so that the operation could be performed deliberately. Of course it very usually happened that the child was not brought to the hospital until it had reached the third or final stage of the disease, and the operation was usually performed within two hours after admission.

THE CORPORAL PUNISHMENT BILL.

THE new Bill relating to corporal punishment, which has just passed a second reading in the House of Commons, wil be generally regarded as a needed and reasonable addition to the penal code. Briefly stated, it provides for the punishment of some youthful delinquents under sixteen years of age by means of a somewhat severe birching, and a similar but more vigorous chastisement of the same kind, to be repeated if advisable, for adult males convicted of certain specified offences. These are violent attempts to injure or alarm the Queen, various forms of robbery with assault, or where dangerous or offensive weapons are carried by the culprit, and a variety of indecent offences, for the most part suggesting or implying the use of violent compulsion. A surgeon is in all cases to attend in order to regulate the application of the penalty. There are some persons, doubtless, who could not be induced under any circumstances to see the justice or necessity of inflicting on adult offenders or even on boys an ordinary whipping. Their error, for such we consider it to be, must at least be allowed the merit of generosity; but in this very merit lies its unwisdom. It arises from a mistaken willingness to confer on any miscreant, however hardened, the credit of

their own more cultivated feeling. The shame of conviction or of ill-doing merely might indeed suffice to keep them gentle, but the conscience of the long-erring evil-doer is less easily acted on. For him, too, the remedy afforded by Christian philanthropy is available. As between individuals it might be legitimate to use it. But time is needed for its action, and success is uncertain. Meanwhile actual conditions press for treatment, and the patience of the individual is no guide for the law which owes to all as a debt the standing ground of present safety. Punishment is its ready and right means of arresting the moral plagues with which it deals, and experience has proved, and will again prove, we doubt not, that a judicious infliction of pain is for most offences associated with violence a more effectual corrective than almost any other.

NOTIFICATION IN ROSARIO.

THE city of Rosario, in the Argentine Republic, has been thrown into a state of confusion, as far as the medical men are concerned, by a recent order of the municipal authority requiring all infectious diseases to be reported to the Sanitary Board. This order, it seems, is to be taken to include venereal diseases, and the medical men are not unnaturally indignant at being ordered to violate the confidences of their patients in such matters. The Rosario correspondent of *El Progreso Medico-farmaceutico* draws a graphic picture of the horrors which would ensue were this arbitrary order to be carried out, which it will not be, as the medical men refuse to have anything to do with it.

ANOMALOUS NERVOUS AFFECTIONS FOLLOWING INFLUENZA.

MM. GRASSET and RANZIER record an interesting case in which curious nervous symptoms followed an attack of *la grippe*. The patient was a soldier twenty-eight years of age, who had previously been a farm labourer and had enjoyed good health, with the exception of frequent cramps of both arms and legs. When attacked by influenza he was admitted to the military hospital, and on the second day had a fit in which arms and legs were acutely flexed. The fit lasted half an hour, he did not lose consciousness, but he passed urine involuntarily during the fit. Afterwards there was temporary right hemianæsthesia. This soon passed off, except as regards the right arm. Movements at the shoulder and elbow were perfectly normal, but movements of the wrists and fingers could not be performed and passive movements were painful. Tactile sensation was unimpaired, but there was analgesia from the wrist to the finger tips, which terminated abruptly just above the wrist. There was also abolition of the pharyngeal reflex. Up to the time of publication no alteration had taken place in the symptoms. The authors regard the case as simply one of hysteria in the male induced by the onset of the influenza.

FOREIGN UNIVERSITY INTELLIGENCE.

Dorpat.—Dr. W. Koch has been appointed to the chair of Surgery, in succession to the late Professor von Wahl.

Gottingen.—Dr. Hubert Esser has been promoted to the rank of an honorary professor.

Groningen.—Dr. M. E. Mulder has been appointed to the chair of Ophthalmic Surgery.

Jena.—Dr. Stintzing of Munich has accepted an invitation to Jena.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Dr. Valentin, the well-known Professor of Chemistry in the University of Bern.—Dr. F. H. Küchenmeister (medical councillor) of Dresden.

WE regret to have to announce the death of Dr. Rowland Morris Fawcett, which occurred on Tuesday at his residence, Scroope-terrace, Cambridge, after a short illness. Born in 1803, Dr. Fawcett proceeded to the degree of M.D. at Edinburgh in 1825. As a medical practitioner he enjoyed for many years a very large practice in Cambridge. He took an active part in local affairs, was for many years a member of the corporation, and filled the office of Mayor in 1843. He was a deputy lieutenant for the county, and had been for some years the senior justice of the peace for the borough. Although he had retired from the corporation, he nevertheless continued to do good service to the town. He was an active promoter of any scheme for the benefit of the town, and it was chiefly owing to his exertions that the large assembly room at the Guildhall was built.

WE are asked to state that the dinner to be given by officers of the Army Medical Staff to Surgeon T. H. Parke, on his return from the Emin Pasha Relief Expedition, will take place on Monday, May 12th, at 7.30 P.M., at the Whitehall Rooms, Hôtel Métropole, Northumberland-avenue. The Director-General will take the chair. Medical officers, past or present, wishing to attend are requested to communicate as soon as possible with the Hon. Secretary, Brigade-Surgeon G. C. Gribbon, Junior Army and Navy Club, St. James's, S.W.

THE study of the diseases of children has come to be acknowledged as one of the most important parts of the education of a medical practitioner. It may interest senior students, therefore, to be reminded of the commencement of the courses of lectures for the summer session at the Children's Hospital, Great Ormond-street, an announcement of which appears in our advertisement columns.

ERNEST WILLIAM WHITE, M.B. Lond., M.R.C.P. Lond., Resident Physician and Superintendent of the City of London Lunatic Asylum at Stone, has been appointed Professor of Psychological Medicine at King's College, London.

THE Cavendish lecture, in connexion with the West London Medico-Chirurgical Society, will be delivered by Professor Ogston on Friday, June 6th.

LITERARY INTELLIGENCE.—The *Centralblatt für Nervenheilkunde und Psychiatrie*, which was discontinued at the close of last year, has been revived as a monthly periodical under the original editor, Dr. A. Erlenmeyer. It is also intended to widen its scope and give it an international character, the names of Professor Charcot (Paris), Dr. van Deventer (Amsterdam), Dr. Ireland (Preston), Professor Kowalenskij (Charkow), Professor Lange (Copenhagen), Professor Lombroso (Turin), Professor Obersteiner (Vienna), Professor Seguin (New York), appearing on the title page. The acting editor is Dr. H. Kurella of Allenberg, and the publisher is W. Groos, Coblentz and Leipsic. To the first number (April) Professor Lombroso contributes an article on Recent Progress in Criminal Anthropology.—A new fortnightly Italian, or rather international, medical journal has just been established under the direction of Dr. Carlo Forlanini, Professor of Clinical Medicine in Turin. Its title is *Il Policlinico*, and it contains, in addition to original articles, condensed reports arranged by specialists on the different branches of medical practice. In the first number, which has just reached us, the report on General Medicine contains sixty-five short notices of mostly very recent articles which have appeared in medical journals of all nationalities, nine of these referring to original papers published in THE LANCET. Full references are given. The language employed is Italian.

ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

Special Verbatim Report of the Twenty-fifth Festival, held April 17th, 1890.

WE referred a fortnight ago to the claims which the Royal Medical Benevolent College, Epsom, has upon the sympathy and support of medical men; but we were not then able to devote space sufficient to do justice to the multifarious interests which the institution embodies. To-day we are in a position, in the subjoined report, to give our readers an admirable statement of the aims and requirements of the institution from the lips of such very competent representatives as Earl Granville, Sir James Paget, Sir Andrew Clark, Mr. Jonathan Hutchinson, and others. The summaries which they laid before their hearers will be read with the liveliest interest, as will also the very definite programme which Dr. Holman, the treasurer, submitted for improving the efficiency of the institution.

Stated briefly, the Epsom College is both a charity and an educational establishment. The difficulty of combining charitable work with intellectual has been often remarked, and was strongly indicated by Sir James Paget in the course of his speech; but the difficulty, though often real enough, has, as he pointed out, been again and again surmounted in the case of schools. Almost all our great public schools took their rise in charitable endowments. Originally intended for the exclusive benefit of the poor, they have continued to minister to necessitous students by means of their foundation scholarships, while opening their portals to the children of wealthier parents, who have been glad to share the substantial educational advantages which the piety of founders had conferred upon the children of the poor.

Founded thus upon the same lines as these better known schools, Epsom College is destined, we believe, to take rank with the best of them in public favour when its merits come to be sufficiently well known. The Council have adopted a very wise decision in resolving to cultivate the extra-professional element in the school. Its relation to the profession being peculiarly close, there is very naturally a tendency on the part of the public to look upon it as an exclusively medical school. This, however, is not the case either in theory or in fact, and the Council have emphasised the public character of the College by creating a certain number of entrance scholarships open to all comers and varying in value from £20 to £40 a year. It is, however, upon a more general recognition of the facilities and advantages which the school and its curriculum afford that the Council must chiefly rely for the furtherance of this object, and hence friends of the institution may do it a real service by the simple process of mentioning it to parents who may be open to suggestions as to the placing of their sons at school.

Of the curriculum it is happily possible to speak in terms of warm approbation. While the classical side of education receives its due development, the modern side is also cultivated with a special view to fitting the pupils for either commercial or scientific pursuits. In this latter respect, the school profits distinctly and in a marked degree from the very lively interest taken in its administration by medical men. The true end of all science teaching in a public school could not be better expressed than it was by Sir James Paget, who said, "What we want is to know not this or that particular thing, but to know how to go on learning." In other words, it is to master the great art of acquiring facts from personal observation. How far this faculty is cultivated at Epsom may be gathered from the circumstance that there has been instituted there a practice of teaching natural history by means of excursions. For lads destined to the career of a medical practitioner a better preparation for professional studies could not be imagined, but the benefit does not end here. There is no walk in life in which the power of seeing a thing in nature with one's own eyes—and not simply by the aid of explanation and description—is not of immense importance and advantage to the possessor. Nothing is more common than to find persons of great attainments stranded for want of some simple piece of information, and destitute of the information through defect of the power and habit of interrogating nature. Books are the atmosphere in which they have their intellectual being. Deprived of books, they cannot descry beauty in a landscape or grandeur in a sky. It is one of the worst vices of academic education that it tends to foster this dependence upon interpreters, and even in some instances perhaps to dull the natural faculties of observation and appreciation. Against such faults the teaching of natural history in presence of the natural objects themselves is the best of all possible preservatives, and in this respect, even if this stood alone, the Epsom College would possess a great advantage over many other schools with which it can be compared.

Turning now to the distinctly charitable work of the institution, we would point out that it has additional claims of quite another order upon the sympathy and support of medical men. Its great educational advantages are placed free of any expense whatever at the service of the foundation scholars. Of these, there are fifty who are qualified for election as being sons of medical men, chiefly orphan sons left in necessitous circumstances. In the case of other pupils, the sons of medical men are received on advan-

tageous terms; while in the case of daughters, although girls cannot, of course, be received into the Epsom establishment, the munificence of Mr. France has provided that a certain number can be accommodated at the School of the St. Anne's Society, their election being entrusted to the Council of the College.

Besides these educational benefactions, the funds of the institution provide annuities for fifty pensioners, who must be either legally qualified medical men or the widows of such, and three annuities tenable by the daughters of medical men in necessitous circumstances. A certain number of the pensioners have, in addition to their annuities, the right of residence within the College, but from this arrangement some inconvenience has been found to arise. It is felt, and rightly felt, by the managers of the school, that the presence in the midst of the lads of a number of unfortunate people who from one cause or another have failed, and failed finally and hopelessly, of the attainment of professional success is an undesirable circumstance; and, on the other hand, it is more than doubtful whether the comfort of the pensioners themselves is really enhanced by the provision of residential accommodation which removes them from their familiar surroundings. These considerations were most forcibly put at the recent dinner before the Society's guests by Dr. Holman, the treasurer to the fund. He estimates that to remedy this defect and give to the resident pensioners an equivalent for the benefits which it is proposed to ask them to resign, it will be necessary to capitalise between £40,000 and £50,000. When this step is taken, the College can go to Parliament for a fresh Act, and expunge the word "Benevolent" from the Charter, which is so great an obstacle to lay boys coming to the College school. The sum is large, but when it is considered how great a benefit will be conferred, and that the benefit will be permanent and accrue to an indefinite number of recipients in turn, it will be seen that the demand is a strictly moderate one, and in no way incommensurate with the object in view. We trust that it will meet with a response worthy alike of the interest at stake and of the profession to which it is addressed—may we not add, worthy to rank with the excellent work already done by the noble-minded founder of the school and those enlightened and philanthropic men who have been his coadjutors in this good work. The suggestion appears to us so admirable, and points to lessening so considerably the suffering connected with the position of our unfortunate brethren, that we have written to Dr. Holman, the treasurer, to state that, providing £49,000 be collected within two years from the present time, we will give the other £1000 to make up the amount he asks for; or, in the event of that not being accomplished in two years, we will subscribe an amount in a similar proportion to the sum actually collected.

THE twenty-fifth Festival in aid of the Royal Medical Benevolent College, Epsom, was held in the Whitehall rooms of the Hôtel Métropole on April 17th, when Sir James Paget, Bart., presided. About 250 members of the profession and others interested in the charity were present. Amongst those who supported the chairman may be mentioned: Earl Granville, President of the College; Sir Andrew Clark, Bart., F.R.S.; Sir Thomas Crawford, K.C.B.; Mr. J. M. Dick, C.B. (the Director-General of the Medical Department of the Royal Navy); C. Holman, Esq., M.D., J.P.; Jonathan Hutchinson, Esq., F.R.S.; Sir Trevor Lawrence, Bart., M.P.; W. Withers Moore, Esq., M.D.; J. Lumsden Propert, Esq.; Sir Ed. H. Sieveking, M.D.; and many other distinguished members of the medical and other professions.

The CHAIRMAN, in proposing the toast of "The Queen," said: My Lord and gentlemen—I propose that we should drink the health of Her Most Gracious Majesty the Queen. There are ample reasons why we should do so with all our hearts; for the Queen has reigned over us and over this great kingdom and empire for more than fifty years, and it has been a period of continual progress in material, intellectual, and moral conditions, and nothing of this progress has been accomplished without the help of Her Majesty. Never once has she hindered anything having for its object the well-being of her people. She has thus been a model for the monarchs of this time and of all future times. Besides, the social and domestic life of the whole kingdom has been improved by the model of her own home life. We therefore cannot refrain from drinking the health of Her Majesty the Queen with all admiration and honour.

The CHAIRMAN then proposed "The Health of the Prince and Princess of Wales and the rest of the Royal Family." It is a toast (he said) in the ordinary course, and yet it is only just to observe that this toast has been raised by them far above the level of a mere formality. They are thoroughly loyal to the kingdom, and the keen interest which they take in every good work carried on amongst us entitles them to far more of our respect and admiration than can be included in the name of mere loyalty to the throne. I am sure, also, that I may speak of his Royal Highness's attachment to the institution to which we do honour to-night, for he has himself taken the chair at a dinner in connexion with it, and one of the first ceremonials that he ever attended was that of the opening of the College. Those present well understand how thorough is his attachment to any institution that is worthy of his patronage. Let us therefore very heartily drink this toast.

The CHAIRMAN next gave "The Army, Navy, and Reserve Forces." He said: This is a toast which is always given, and with good reason it may be given at the present time; for if there is one thing we all desire, it is the maintenance of peace. Those forces, by reason of their strength, bravery, and discipline, make it manifest that it is prudent to maintain peace with this kingdom; and we share in the advantages which peace brings to the whole country. Englishmen should desire their maintenance in their full strength; and we may refer to the great forces of the nation as an admirable example of that discipline which should be maintained in every school. Every boy must submit to some personal inconvenience for the good of the whole, and, besides, we may justly drink it for the high code of honour which prevails in all the services—a code of honour far above that established by law. It will be well for every schoolboy to learn and to observe it. So I propose to you this toast, and I couple with it the name of Sir Thomas Crawford; and this may suggest another reason why we may especially honour it—namely, that the Medical Department of which he has been the head does all that is possible to diminish that which is hateful in war—the misery of distress, the destruction of life, and the wretchedness of disease. Need we have more motives than these?

Sir THOMAS CRAWFORD, K.C.B., late Director-General of the Medical Department of the Army, who was received with applause, in responding to the toast, said: I rise with very great pleasure to acknowledge the honour you have done to the Army, Navy, and Reserve Forces. The words in which the toast has been proposed would, I am sure, be warmly received and acknowledged by those forces were they here; and in returning thanks permit me to speak for the services, and to say what I am sure every Englishman feels to be nothing short of truth, that those services are well entitled to the honour which it is customary to pay them in public and distinguished gatherings like the present. Sir, I have been advised that on this occasion, in anticipation of so many speeches that are to follow, that brevity is a desirable qualification, and in order that I may be brief I will only ask you to permit me to use one expression of regret with regard to this toast, and that is that the College which is so well represented here to-night is so little known in the

public services of this country. I make that remark in the hope that the founders of the College will take steps to make known the advantages of this Royal Medical Benevolent College, and especially of its school, to the members of the public services, amongst whom there are very many who require for their children exactly what this institution provides—liberal, honest, sound, generous, and moderately cheap education. It is astonishing how the public services are so sparingly represented here to-night, but I am quite satisfied that did they know that such an institution existed and was available, and that their sons might have free access to it, you would have had a very much larger representation of the forces here to-night. That that may be the case in the future is my sincere wish. I thank you for the honour you have done me in coupling my name with the toast.

Mr. JONATHAN HUTCHINSON, President of the Royal College of Surgeons, in proposing the toast, "The Houses of Parliament," remarked: The Committee, and those with whom rests the responsibility for the arrangements of the evening, have done me the honour to entrust this toast to me. Let me say to them that they have taken a very great responsibility upon themselves in doing so. Not that I have the slightest reluctance to propose to you, gentlemen, the toast of health, happiness, and success to the members of the two Houses of Parliament. We all of us wish that, and feel the greatest possible interest in the success of our governing powers, and I am sure you will drink this toast with enthusiasm. But there are some things which, because they are so easy—or seem so easy—are really very difficult to do well, and that is the case with a toast which is so obvious as the present one. I submit that one of the great charms of the medical profession—and that is, I think, a suggestion which will appeal to the hearts of us all—is the union of the sense of power with the sense of responsibility. And I submit next to you, gentlemen, that I do not know whether I should not even place the two Houses of Parliament who are concerned in the government of this great empire as superior in those qualifications to our own profession, but I think perhaps I should, and at any rate I may, admit that if I were anything but a medical man I should like to be a member of Parliament. We have no hope of the House of Lords—I mean that we have none of us any aspirations as regards the Peerage; but not a few of us, I suppose, look somewhat longingly towards the House of Commons. It has been said that the House of Commons is the pleasantest club in London. Here you associate on equal terms with men who are concerned with all departments of science and knowledge, and who are concerned actively, and not merely as amateurs, but as those who may be called upon at any moment to bring into useful exercise the knowledge that they have gained. And this is the great charm of human life—the sense of being able, so to speak, to build oneself into the great edifice of human hopes and contribute our little quota to the success and happiness of those around us and of the ages which shall come hereafter. Gentlemen, I must not occupy your time, and I need say no more than that we wish them happiness and health and patience. I might say, without venturing upon political subjects, which are certainly out of the question here, that it is possible that the House of Lords may before very long have some trouble in reference to the concerns of the College of which I have the honour of being president, and that they may have to pass back into the history of bygone days, and investigate the concerns of the Barber Surgeons and other bodies. It is right, therefore, in connexion with this matter, that I should wish them good health, which may conduce to patience. I hope I may not be misunderstood if I suggest further that it is a useful function of the House of Lords to impede useless legislation. I beg to couple with this toast the names of two gentlemen who are well known to you—Earl Granville and Sir Trevor Lawrence. In speaking to an assemblage of surgeons such as the present, I cannot help—and I am sure Sir Trevor Lawrence would not wish me to try—I say I cannot help remembering that he is the son of his father—of a man who was illustrious not only in his profession, but in various departments of general science. But not only have I pleasure in coupling the name of Sir Trevor Lawrence with this toast because he is the son of Sir William Lawrence, but also because he has done excellent work himself, not only in the House of Commons, but in connexion with science, and especially with botanical studies, and has thus proved that he has inherited the abilities and tastes of his father. In connexion with the House of Peers, I have to couple the name—and I am extremely happy in being able to do so—of an illustrious statesman, and of one who, as Chancellor of the London University, is foremost in the promotion of general education, and last but not least to us on this occasion, the President of this College, a president who has taken a very active part in its welfare; I allude, of course, to Earl Granville.

The toast having been duly honoured,

Earl GRANVILLE, who was enthusiastically applauded, said: It is not an unusual thing that the toast in connexion with the House of Lords should be carried enthusiastically in assemblages of this kind in this country; but I consider that it is a very great compliment to the illustrious assembly to which I am proud to have belonged for more than forty years that it should have been proposed this evening by one so eminent in his profession as the President of the Royal College of Surgeons, and so well received by such a singularly representative body of the noble profession of medicine. I listened with great attention to what fell from the President of the Royal College of Surgeons in his very graceful speech, and I observed that he alluded very felicitously to the treatment which the Royal College of Surgeons might receive from the House of Lords, but he said nothing of the treatment of the House of Lords by the medical profession. I own it was rather a relief to me, considering that by some the House of Lords is considered to be rather a sick patient. I think it was with great tact and judgment that the president avoided that text. Seated, as I am, between the President of the Royal College of Physicians, one of my old an intimate friends, on the one hand, and Sir James Paget, on the other, I felt that the most heroic remedies might have been proposed as regards the House of Lords by those whose business it is to cure infirmities. Mineral poisons, which Sir Andrew Clark might have suggested, with amputations which Sir James Paget may have recommended—and, indeed, that some remedies might have been suggested by men less renowned—as to putting it out of its pain altogether. I am anxious to see links between the House of Lords and the College, the festival of which we are celebrating to-day. First, it is at Epsom, and many of the House of Peers are in the habit of going to Epsom for a very great ceremony indeed; and, secondly, there are members of the House of Lords who, like myself, retain a very painful recollection of early days of the mineral salts we used to be obliged, for good or for bad, to swallow. I cannot help recollecting that at Epsom is the residence of one of the most eminent members of the House of Peers, who is not altogether blind to some of its possible defects. I hope his efforts to make Epsom the metropolis of one of the most beautiful counties in England have been effectual. I claim for the House of Lords the fact that among its members are some of the soundest and most intellectual and earnest friends of education to be found in this country. Nothing would be more grateful and agreeable to them than the progress of such a school or college as that of which we are now celebrating the festival, which, as I understand, aims not to be a mere medical school, or school for the sons of medical men, but, while it possesses great advantages, material and intellectual, for the sons of medical men, shall at the same time in its scope and extent be equal to all the other public schools. I have ventured to allude to only a few links which I venture to say exist between the House of Lords and the medical profession, so well represented to-day; but I am also a little anxious to take something back from this evening to the House of Lords, and I will venture to tell you of my reminiscences. I had not been five minutes in the room downstairs before one of the most eminent physicians of London was good enough to speak to me. When I said to him that this was a gathering of singularly active brain power, he said, "It is also lucky for the patients." I said, "How?" "Oh," he replied, "they will all be so very much better to-morrow." I listened indiscreetly to a conversation carried on between one of the greatest of your surgeons and one of the greatest of your physicians. At first the conversation seemed to be rather of a frivolous character, rather in the shape of a riddle. The surgeon asked the physician whether he ever knew of a case where the cause followed the effect. The physician could not bring one case of the kind to mind, and the surgeon suggested that it occurred when the physician

followed his patient to the grave. I think it was a very important fact, bearing upon the state of the profession, and I am sure you will give me your full authority to repeat the conversation to the House of Lords when we are engaged in that important discussion to which the President of the Royal College of Surgeons has alluded. You will allow me to repeat again my earnest thanks for the honour you have done the House of Lords to-night.

Sir TREVOR LAWRENCE, M.P., in responding for the House of Commons, said: I cannot help thinking that you would have been very glad if it had been your good fortune that the noble lord had had to include the response to the House of Commons with the House of Lords. I can only say for myself that I am very much obliged to you for the kind way in which you have drunk the toast of the health of the House of Commons. Lord Granville was referring to the links which connected the House of Lords with this College; I am not quite sure that we cannot show that a larger number of the House of Commons attend certain festivities in the neighbourhood of this College. Up to the present time I am not aware that their lordships House has started steeplechasing, but considerable honours in that direction have been gained by several members of our House. It is very much to the advantage of the medical profession that no Bill of any importance connected with the profession has lately come before the House of Commons. It is an advantage that it should be able to manage its own affairs. When I first had the honour of being a member of the House of Commons there used to be brought before that House a Medical Act Amendment Bill every year, and I was on the committee of one of them, and I am thankful to say that these troublesome questions have been entirely at rest for some years now, and I believe the medical profession is perfectly satisfied with the position it now occupies. I think the members of the profession should be grateful for the Infectious Diseases Notification Act, for I cannot help thinking that it will help the people and be of great advantage to the health of the public. The noble lord told us that he should like to take something back to the House of Lords from the present dinner. I was under the pleasing delusion that his lordship's House had risen long ago. No obligation rests upon him to go there to-night, but I have to return to the House of Commons, and I shall be able to take something back—namely, the recollection of the pleasant company in which I have been. One matter which has often struck me is how very little reward members of the medical profession gain by the services they render to the public. I am not speaking of pecuniary reward in the sense of the amount of money they may be able to accumulate, though I suppose if you were to compare the medical profession with any other profession you would find from that little paragraph which we know so well in the *Illustrated London News* that no profession is found to leave behind it so little pecuniary token of the work which it has done. When you consider, as I think we are entitled to consider, the enormous services which the medical profession confers upon humanity, I think it is a little to be regretted that that is so. Allow me to mention some of the discoveries which the profession has placed at the service of humanity—discoveries which have never been the subjects of patents. Look at the enormous service rendered by the discovery of vaccination, antiseptics, anæsthetics, and the discoveries of M. Pasteur, and it will be seen that the medical profession has earned a very small pecuniary reward although they have done a vast deal to remove human misery. I am not sure that the fact that this is done without the hope of pecuniary reward is any great subject of regret. I must say that I should like to see a few more members of this profession in the House of Commons, and also a few in the House of Lords; there are possibly not a few subjects they might be able to illuminate in that great assembly. One subject mentioned this afternoon by the Chancellor of the Exchequer—namely, that the very large surplus which he has got to dispose of, £3,547,000, is very largely made up by the increase in the amount we have been drinking. I am told by all the best medical advisers I have had that this traffic is very bad for us; and if that is the case, it seems very good for the medical profession. The Chancellor of the Exchequer said to-day that the great increase was in the consumption of rum, and he said that the total quantity of rum drank in this country last year amounted to 245 million drams, an excess of 30 million drams over last year. This, I think, is a grave question for the consideration of this profession. I do not wish to detain you any further, except to say one thing, and that is to repeat that we want more members of the medical profession in the House of Commons, where, I venture to say, they would be of very great service to the country at large.

Sir JAMES PAGET, in rising to propose the toast of the evening, "Success to the Royal Medical Benevolent College," said: I feel as if I might fairly leave the announcement of the toast without adding one word to it; because it is only to drink to the fulfilment of the very purpose for which we have met. It is really only in compliance with the ordinary rules of after-dinner speaking that I shall venture to state some of the grounds on which we should do our best for the promotion of this College—grounds which might be much better stated by others than myself. In the paper which most of you have before you it is stated that the objects of the institution are twofold—namely, educational and benevolent. Fifty foundation scholars—the necessitous children of medical men—are educated, boarded, and clothed at Epsom College free of cost; seven scholarships for girls are maintained at the school of St. Anne's Society; and fifty pensioners, who have been medical practitioners, receive annuities of £21 each. I think from one's knowledge of the ordinary course of the world one might fear that there would be some risk in endeavouring to accomplish two such purposes in one institution when one of them appeals to sentiment and the other to reason. One proposes to do that which seems right to the affection and the other that which seems best to the understanding. It is easy to cite instances where these two designs, being taken together, have failed. It has been found that either could be achieved without the other, but rarely have the two succeeded together. I will not say that it is because one appeals to the heart and the other to the head—I will rather imitate the language of physiology, and say that it is as if there were two distinct nerve centres concerned in this appeal, which seem to be mutually inhibitory, so that that which would contribute to the one purpose will rarely help the other. But I venture to say that nothing of this kind is applicable in reference to the Epsom College. For the coincident promotion of education and benevolence has really been at the foundation of all the best and greatest teaching institutions in this country. I hardly need refer to the colleges of our old universities, many of which began in the desire to educate poor students. The schools of the great City Companies began as charities. The Merchant Taylors' schools, the school at Tonbridge, St. Paul's, the Charterhouse, maintaining now the reputation of the finest of the public schools—were founded for the purpose of charity, and afterwards opened their doors to all, as our own has done. In fact, I hardly know one among the great old schools in this country which had not a benevolent foundation. Surely, then, we may feel ourselves safe in following the examples set by the greatest educational establishments in this country—beginning in charity, never ceasing to maintain in charity the great ends of their foundation, but opening their doors to the sons of the rich as well as of the poor.

But let me keep to that which is set down—the twofold purpose, the benevolent and the educational—and I will take, in the order of their history, the benevolent purpose first. And surely it will be hard to find an instance in which benevolence may be better spent than on those who are the objects of this charity. Here are fifty members of our own profession, old men or their widows, all reduced to utter poverty. Surely we are bound to help them if we can. We who are prosperous, and in various degrees possessed of what is deemed a sufficiency in life, can hardly imagine the state of mind in which those poor old people look back on life, and on those fair attempts at success which have all ended in utter, total, and final failure. We speak of the hardness of being sometimes driven to compulsory work; but what can that be in comparison with the hardship of bearing a continual and enforced idleness? Those men who began with the hope of being active in the service of the public for years and years to come, and who have totally failed, and are in absolute poverty, in absolute indolence—we may surely help them to bear the griefs that they must, justly or unjustly, suffer, and endeavour if possible to maintain them in something like comfort. And so with the fifty foundation scholars. Here are boys born in a rank from which they must utterly fall if they are not helped; we should love to help these, who now depend upon ourselves, and maintain

for them that good education and good prospect in life which is provided by a charity of this kind. I venture to mention one thing more which I think may impress itself on many here. When we look back on our own lives, I am sure there are many of us who can remember times when it was a mere question whether we should go on in prosperity or fall down into some such wretchedness and poverty as these are in; when it seemed that failure of health, or some change in the conditions on which our success seemed to depend, would have left us in a position of destitution such as that which we are now asked to relieve in others. If we had died we should have left those dear to us in such absolute poverty as we are now trying to relieve in others. It cannot be forgotten that there have been times in the lives of many of us when, if it had not been for what some call chance, but what I would call God's mercy, the fate of those left behind us would have been just the fate of those we want to relieve. Here is surely good reason why we should give freely ourselves and exercise what influence we can on others to help the strictly benevolent part of the institution of Epsom College. And if I might mention one thing more, it is the need of holding ourselves in a close and mutually influential brotherhood. Differences will arise among us in the exercise of our profession. We must have our rivalry one with the other, political controversy, scientific disputes, and the like; and these may sometimes separate us from one another. Let us, then, be clear that we have one bond of absolute brotherhood, one bond in which the strong are bound to help the weak, and by which we should all be combined to hold ourselves in firm, unyielding, mutual brotherhood.

Now as to the educational part of our work. I maintain that this is in no way separate from the purely benevolent part. For what better could we do for the sons of those who have failed in our profession than give them the best education possible—the best within the reach of any funds that we can raise for it? In doing so we give them the best possible hope of success in any line of life they choose to follow. This is really the history of all the old and best foundation schools in the kingdom. They began by being schools for the poor, and they taught the poor so well that the rich were anxious to come to them. It was so in places like St. Paul's, the Charterhouse, Eton, Winchester, and the rest of them. So may it be with the Epsom College, which in due time may achieve that for which we hope, and match with the schools which are best in the kingdom. This should be our design; to have a thorough and complete education established for all who come to the College; then we shall have the rich and the poor working and playing together, and each growing up all the better for his intimate association with the other. Speaking of the method of education in the school, it is before you in the paper which most of you have in your hands; and I think it is wise that the scheme of education here is said to be on the system which has proved so successful at Wellington, Haileybury, Marlborough, and other public schools. His lordship (Earl Granville) and I, in the offices which we hold in the London University, are very familiar with the questions as to what should be the subjects taught to students in the higher branches of education. I will not venture to say what his lordship's opinion is, but, for myself I have not been able to form any clear opinion at all as to which, on the whole, is the best group of subjects which every boy in a public school should be compelled to learn. But in the controversy among teachers of various subjects I have observed this result—that every teacher endeavours to prove that his own is the best possible subject that everybody could be compelled to learn, and that he therefore teaches it as well as he possibly can, and in a manner calculated to teach them how to learn; and, after all, the best thing when the period of education has passed is to know how to learn for ourselves. What we want—and what I venture to think all men want—is not only to know this or that particular thing, but to know how to go on learning, under their own guidance and power.

You will observe that at Epsom they do what is every year becoming more and more important—namely, that in the later period of education, as soon as it is understood what is the method of life for which the student is to be prepared, this should determine a part of his education. The College is not bound down by the strict views of education, which one can remember in one's boyhood, requiring certain fixed things to be learned and attending to nothing else. Other things are at the same time with these well taught—science, the best things for commerce, for the military services and the civil service, I think, therefore, that we may maintain that the College is conducted as to its methods of education, and also as to the effects of its education, in the best possible manner, not only for those who are to be members of our profession, but for those of all classes who will come to it. I am especially glad to see that there has been introduced a system of teaching natural history. I believe this to be one of the very best courses of education that can be followed, and one more useful in our own profession, perhaps, than in any other; for what one cannot but observe in some of the best scholars in classics and mathematics is a want of the power of observing for themselves. That power can be better educated by the study of natural history than in any other way. I have often felt the influence of such studies upon myself. In my early life I devoted myself very earnestly to the study of botany, collecting and having correspondence with friends everywhere, and I made a large herbarium and studied the old Linnean system of botany of the time, and afterwards the strictly systematic botany, with all my power. Many a time since then I have asked myself whether I ever learned anything in that study that was of the least use in the practice of my profession, and I have had to say, "Absolutely nothing." But the systematic study and the power of observation, the enthusiasm given in the pursuit of mere facts, the cultivation of the love of order, cataloguing, brief description—I cannot name a single thing in the whole course of my education in school or since that has been of so great advantage to me, and I look with the greatest satisfaction to the fact that the Council of the College have determined that a course of this kind shall form one part of the education given at Epsom College. One thing more let me notice, although it may seem inappropriate to the question of education, that in this institution every arrangement is made for the best possible pursuit of games. Some may say, "Oh, it is a very good, excellent, and healthy thing to do." Yes; but the yet greater good of these games is in the promotion of the moral health. Games may lay the foundation for a real moral education, inducing a feeling of contempt for personal quarrels, and a love of acting together; I believe that the education in fair play and mutual honesty which is given by the healthy pursuit of school-games cannot be over-estimated. There is no profession in which dishonesty is so easy, and none in which it meets with a larger pecuniary payment than in the medical profession; and there is none in which every student ought to be more completely trained to hate it as a thing utterly contemptible.

I am to propose with this toast the health of our treasurer, Dr. Holman, on whom, with the other members of the Council, the great work and chief responsibility of the management of the College must depend. I half wish that there were a toast to our founder and chief benefactors; for one cannot pass by the memory of John Propert, the founder of this College—a man whom I remember well, and enjoyed the friendship of. He was one of those men who had not merely a wish for good; he was one of those who had a strong resolute will that good should be done, and he gave himself to the institution of this College with great mental power and still more with a thorough hearty resolve that that which he attempted should be carried through. Among other benefactors it would seem a shame that I should omit my friend and old pupil, Dr. Haviland, who has given a very large sum of money to the funds of this College. One other name I must allude to, one whom we have lately lost, and whose death forms the only dark spot that clouds the happiness of this day—I mean Mr. Jonson. I think he was really one of the most benevolent men I have ever known. I knew him intimately in connexion with the Medical Benevolent Fund. He was constantly engaged in collecting subscriptions everywhere for this object, and not merely collecting, but giving, and using every endeavour even to the very last for the good of this institution. Let me record it of him that, though enfeebled and laid low by paralysis, within the last fortnight he signed, as he always did, some sixty or seventy cheques for the periodical distribution of the annuities; and I know that one of his last

wishes was that he might attend this meeting to-night—one of his last regrets that he found himself unable to do so. We may justly mingle one sigh of great regret with the happiness and hopefulness with which we meet to-night, for of all the benevolent, earnest, and hardworking men whom I have known in our profession, none ever surpassed George Jonson. I beg to couple this toast with the name of John Propert's successor, who is a man animated by an unbounded desire for the good of the College, and invite you to drink success to the College and good health and long life and long-continued work to the treasurer, Dr. Holman.

Dr. HOLMAN, in replying to the toast, said: You must allow me, if you please, to thank you in my own name and the names of those acting with me on the Council for the manner in which you have responded to this toast. It is with bitter and unfeigned regret that I stand here to-night to lament the loss of our dear chairman and head of the council, George Jonson, than whom I never knew a firmer friend or a more courteous gentleman. Dr. Broadbent is here, who knew him even better than I did, and he would be able to tell you how active he was in the small details of doing good, sparing himself nothing in order that that good should be accomplished. I have been now in public life some years, and I may safely say that George Jonson was the most perfect chairman I have ever had the pleasure of sitting under. Sir Thomas Crawford was just now speaking of our not having tried to make ourselves known in the public services. I can simply say that throughout the time I have been treasurer to Epsom College it has been my endeavour to sow broadcast the benefits it can give to our professional brethren. The Council and their friends in the profession, from Sir Joseph Fayrer downwards, have spoken of it everywhere, in India and in the colonies; and no one has ever given us more loyal support than the Editors of THE LANCET, following the precedent set them by the founder of that journal, whose name we have still upon the prize roll of our College. If Sir Thomas Crawford will tell me how, most thankfully will I do more. I think we need to be better known. For myself, I have spared neither time nor money in trying to make the College known both to those within and without the profession. That we have an educational establishment at Epsom second to none, I fearlessly can, and with the utmost assurance do, assert. We do not wish at Epsom to bring up any boy in any one particular line of thought. We study each boy for himself, and try never to put a round peg into a square hole. If the boy is not fit for the learned professions he may be fitted for a mercantile life. A case occurred lately where, of sixty-two applicants for a situation in a London bank, we sent up one of our boys who ran clean away from all the others. On the next vacancy occurring in that bank, the managers wrote to us asking us to send them number two. We try in every possible way to study each boy for himself, and make him a unit to act for himself, and to fit him to take his place in after life. I cannot pass over the great mass of obligations which I am bound to acknowledge is felt by all round this table and our regret for the loss of one of the sincerest friends the College ever had, and who was present at our last gathering two years ago—I mean the late head master, the Rev. Cecil Wood. That man died in our service. He laid himself out unflaggingly and beyond his powers to place Epsom College in the highest position possible. His work is now in the hands of a man we utterly trust—the Rev. T. N. Hart-Smith. I sometimes ask myself the question, as the successor of John Propert, whether I do all I should for the College. I try to do it, and I should like to throw out this idea for you to take home and think over. I do not know that at the present moment we can add anything to what we are doing for the foundationers. In the earlier part of this century the greatest idea of charity proposed for old people was to give them a pension and to put them into an asylum. Since then the whole course of public opinion has changed, and if we take Greenwich Hospital as a proof, we must admit that it is not the greatest charity to drag poor old people away from their homes; but it is the greatest charity to enable them to live and die and have their last hours soothed by those amongst whom they have lived. Was John Propert a man to stand still? I think not, and it is for you, the governors of this institution, to tell me whether I can move in this direction, and whether we can provide and capitalise such a sum as shall remove these poor old people from the College precincts, and enable them to live and die amongst their relatives and friends. I think, myself, that if I were very poor and obliged to live and to die in sorrow, I should choose to live and die amongst my old associations, on even a very moderate pension. But I say this, that if we are to take this step you have no right to take one iota from them to which they are entitled under the express wishes of John Propert. Should you, therefore, ever desire me to do this, you must enable me to capitalise such a sum of money as shall enable me to pay the rental incurred by their removal and to provide them with other necessaries of life which are provided for them at Epsom, and give them an equivalent in money payment. If you ever enable me to give them thirty guineas a year to live thus, my own belief is that we shall free Epsom College from a standing difficulty. It is not wholesome or good that the young aspirants to professional life should have set before them the failures of the profession. To effect this great remedy you must help me to capitalise between £40,000 and £50,000 before it becomes possible, and you have to face that fact. If you do this you will make Epsom College at once an intellectual success, and I will pledge myself and my Council that in a very few years we will make Epsom College School carry every foundation scholar. For this purpose we will work hard, and I believe if we carry it out we can pay out of the profits of our school all the expenses connected with our foundation scholars, and lift the College out of what has been termed "the charity school groove," and make it a great educational establishment. I thank you most sincerely, Sir James Paget, for your more than eloquent advocacy of our claims. I believe, most thoroughly, that you have stated not one single word or sentiment that is not sober truth. Knowing as I do, and labouring as I have so long in this particular work, I can endorse every single expression you have made use of, and I thank you from the bottom of my heart. It may be in the recollection of some of you that I am treasurer to Epsom College and also to the British Medical Association. I should like as many of you as are members when you go back to your branches to tell the members the work we are doing, and you may thus do inestimable service in helping on this College. I should only be too delighted, when paying the expenses of members for the meetings of the Council of the Association from the right-hand pocket, to put that sum into the left-hand pocket for the benefit of Epsom College. If I were to tell you the miserable percentage of the profession who subscribe to support our College I hope it might be thought matter for shame by many who now carelessly pass us by.

Earl GRANVILLE, in proposing "The Health of the Chairman," said: I have very great pleasure in proposing the next toast, which is to render our best thanks to Sir James Paget. I hope it is not presumptuous in me to congratulate the Council in their selection of a chairman for this occasion. What is the occasion? It is to do honour to the institution of which the objects have been described with such eloquence to-day. Some discussion has arisen as regards the means of publishing information with regard to Epsom College. It appears to me that the circulation of the remarkable speech of our chairman, supplemented by that of our treasurer, is the best means I can suggest for giving the knowledge, and communicating the true knowledge to the public. I should like to consider, before referring to Sir James Paget, what would be the beau-ideal of a chairman for this occasion. Clearly there would be some advantage in having a man as much respected, esteemed, and beloved by the outer world as by the profession itself, and if a man of the highest possible culture and education, who in the midst of a laborious professional life never ceased to give his energy to the promotion of education in others, I think that a man of that sort is the one you desire. But this would not quite complete my notion of an ideal chairman. Suppose such a man were unable to express himself, and unable to convey his thoughts to others, I am afraid he might be a failure on such an occasion as this. But if I am right in thinking that Sir James Paget comes out of that difficulty in a manner which is rarely equalled by politicians, lawyers, divines, or professionals, whose business it is to talk, and that he could not be rivalled by them in the power of convincing, persuading, and teaching his audience, I venture to say that he does complete the beau-ideal of a chairman.

Sir JAMES PAGET returned thanks.

Sir ANDREW CLARK, in proposing the toast, "The Loca

Secretaries," said: It has sometimes been said that we Englishmen—I beg pardon, I have lived and dwelt so long in England, and so many of my oldest recollections are connected with it, that for the moment I forgot that I am only a poor Scotchman; but this is a benevolent institution, and will forgive my presumption—it has been said of us English people that we cannot always rise to the dignity, importance, and full significance of occasions such as this is. For the first time in my life I begin to think that there may be a little truth in the accusation. You have had the great privilege to-night of listening to the splendid eloquence of Sir James Paget. You have had the equally great privilege of listening to the exquisite felicities of Lord Granville. From both you have had in different ways, each perfect of its kind, an account of the objects of this institution such as ought to be circulated throughout the length and breadth of the land; and which, if so circulated, could not fail to be the best possible advertisement of the objects, the merits, and the claims of this admirable College. What has been left unrealised? Two things: the first thing is that this assembly to-night is composed of many hundreds of persons, who are all of them engaged in trying to relieve the physical sufferings of mankind, and not only, as Sir James Paget said so eloquently, to minimise all that is hateful in war, but to do something of still greater importance to mankind in peace—to minimise all that is perilous. And not only that, but there are assembled here to-night some three hundred persons who with narrow means and uncertain resources are striving to do for the unfortunate among them that which the public, which gets so much of their self-denying services and gives so little in return, should do for them. If it be, and I am old-fashioned enough to suppose that it is, that there is something more than the material and the intellectual in life—if it be that, underlying all that is great and true, and highest and best in life, there are ideas of truth, of duty, of love, and of self-sacrifice,—then this is one of the greatest occasions that I have assisted at for many a day, and I hope we shall all rise to the occasion, and do that which the treasurer has challenged us to do, and raise the money for which, with a wise importunity, he has asked us to-night. For great as is the work we have done—and it is great for such a poor profession as ours,—and much as we do, it is nothing as yet to what we may and ought to do. The profession does not, I repeat, do all that it ought to do for this College, and until at least seven-tenths of our brethren become supporters of the work there should be no slackening of appeal and no remission of exhortations to duty. Our doctors for the most part are overworked and underpaid, and it may not be doubted that the difficulties of giving even small subscriptions are many and great. But these very difficulties are at once proofs and measures of the necessity of giving; and all the sacrifices which it may involve will be also the measure of the good which will be returned to those who give as well as to those who receive. I see clearly that until by something like a missionary enterprise every district is worked by a missionary coadjutor who shall shame every professional brother into the doing of his duty in this matter, we shall not achieve those results in educational and benevolent work which have been set before us to-night with so much lucidity, and eloquence, and strength. But we have done a good deal which would not have been done if it had not been for the zealous services of the local secretaries throughout the country. There are 250 local secretaries, who are, so to speak, acting centres in various parts, canvassing for support, and obtaining sums varying from two or three to forty or fifty guineas. That is something worthy of our grateful acknowledgment. So, then, it is our duty to-night to make this acknowledgment to these missionary secretaries in various parts of the country; and I, in your name, return them our most grateful thanks. I hope that they will renew their exertions and succeed in obtaining in the future double the amount of the subscriptions they have received in the past; and that they will allow no one amongst their neighbours and friends any quiet until a just response is made to their appeals. There was one point only which was not touched upon in the eloquent and gracious tribute paid to the memory of Mr. George Jonson. In addition to all that has been said of him he was in the highest and widest sense a man of true righteousness. He was not content to be merely zealous in good works and unwearied in well doing. He had in him that spirit of sacrifice which transfigures the human into the divine, and enabled him to subordinate his own interests to the good of others, and to show forth in his work and life what the life and work of a good man should be. I beg to couple with this toast the name of one of the most active of the local secretaries, Dr. Arnison of Newcastle.

Dr. ARNISON (Newcastle-on-Tyne), in responding, said: I am sorry more local secretaries are not present, and I am also sorry that many of us who are present do not do a great deal more work. My experience of local secretaries tells me that it depends entirely on their personal influence. I do not think that ought to be the case. Local secretaries in the very nature of things are men in busy practice; it is only a man who has been some time established in practice, and who may be supposed to have some interest and to influence his neighbours to give their money, who is able to act as a local secretary. It seems to me that this College should be made better known than it is, but to become known it must be by personal appeal, and I believe that the work of personal appeal should not be left entirely to the local secretartes. It is an irksome business, and not at all pleasant sometimes; and I think somebody connected with headquarters ought to go down towards the close of every year and appeal directly to medical men, and call upon the doctors in any particular town. Seeing that cheques take some time to collect, and that it takes some time to collect the money, I venture to suggest to the Council to allow the local secretaries to employ a collector, permitting him to retain the shillings and hand over the pounds.

Sir ANDREW CLARK pointed out that no doubt it was not a delightful occupation, but it should be remembered that self-sacrifice was the law to abide by, and referred to the fact that the late Mr. George Jonson, himself a man in busy practice, had during the course of his life collected a sum of £5600 for the Epsom College.

After the banquet, the intervals between the toasts was enlivened by some excellent vocal and instrumental music, admirably rendered, under the direction of Mr. Edward Plater, who was assisted by Master Charles Steward, Mr. James A. Brown, Mr. Edward Dalzell, and Mr. Frederick Bevan, and much appreciated by the distinguished audience who listened to it.

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EUROPEAN ACCLIMATISATION IN THE TROPICS.

THIS question is agitating the medico-military department of the Italian War Office now that Italy has effected a permanent footing on the Abyssinian littoral of the Red Sea. General Ricotti, perhaps the most experienced of Italian War Ministers, has grave doubts as to the wisdom of planting more than a naval station and garrison at Massowah. The colonial projects in the Abyssinian interior, so fondly cherished by Signor Crispi, he would enter upon with caution, if not absolutely discourage. The Italian, he says, is not prolific in Africa. The European races do not take kindly to latitudes of a higher temperature than those they normally inhabit. British experience in Hindostan is quoted in support of the General's position; in particular the opinion of Dr. Wise, who, after thirty years' practice in India, found that he had never met an individual of European blood in the third generation. Great Britain commands India, but she does not colonise it. The same may be said of the Dutch in the Asiatic archipelago. Even in Algeria the French are not quite acclimatised. As recently as 1853 their births in that settlement stood at 41 per annum, while their deaths stood at 52. If at the present moment there is a slight preponderance of the former over the latter, it is ascribed to the fact that the Algerine Jewish element has been naturalised, and its births are classified as those of French subjects.

As against General Ricotti and his school, it is contended that the adaptability of the whites to tropical latitudes is not a uniform quantity. The southerns of Europe take more kindly to those latitudes than the northerns. The Italian or Spaniard acclimatises better than the Frenchman; among the French themselves, the Provençal better than the Norman or the Breton; the French, as a whole, better than the Englishman or the Hollander. In Algeria, for example, the death-rate of the German is as 49 to the Spaniard's 34. At Malta the British soldier dies quicker or oftener than the Maltese. The blonde races are less fit for colonisation of the tropics than the brown—a fact of which Dr. Bordier was so convinced that he counselled the French Government to send to Algeria its soldiers of the latter in preference to those of the former type. Arguing from such premisses, the supporters of Signor Crispi's African policy fail to see the force of General Ricotti's warnings.

But they have yet another argument. Italy's Abyssinian possessions now include various climates and various temperatures. Massowah on the seaboard is warm and moist. Asmara, in the landward hill country, is dry and to a certain degree cool. In a comparatively restricted space Italian Abyssinia is divisible into three zones—the lowest, very hot; the middle, warm, temperate; the highest, temperate, cool. The first contains the littoral, the second the valleys sloping to the Red Sea and the Bogos country; the third, the inland plateau Colonisation is possible under these conditions. The settler has only to seek in altitude what is denied him in latitude, to find the temperature in which he can live and thrive. Java has its Prianga, and the Madras Presidency its Neilgherries; if Mexico has her Anahuac, so Italian Abyssinia has its Asmara. Constrained to live at Massowah, at Archico, at Arafali, at Assab, the colonist from Italy would doubtless disappear at the third generation, but in the Bogos, in the Ghinda Valley, on the Tigrine tableland—alternating between hill and plain—there is no reason why he should not succeed in acclimatising himself. Be it further observed that the danger to the settler in tropical climates comes not from the heat in itself, but from the heat *plus* the telluric exhalation—in other words the soil, not the sky, is to be feared. Crews maintain their health even in equatorial latitudes so long as they remain on the high seas; illnesses supervene when they approach the land and the breezes that blow off it. The colonist is free from ailment till he begins to cultivate, to disturb the earth's surface and let loose the gases with which it is charged. The period of *défrichement* is thus the perilous period for the European settler; but fortunately for the Italian in Abyssina the warm part of that possession is the least susceptible of cultivation, while the temperate part is that which brings in the best harvest; where he has to work most profitably the climate is the most healthful. To the objection that the cold (very comparative) of Asmara and of the higher table lands might prove as prejudicial to the acclimatised settler as the heat of Massowah, the reply is as old as Vitruvius, whose induction remains true: "Quæ a frigidis regionibus corpora traducuntur in calidas non possunt durare sed dissolvuntur; quæ autem ex calidis sub septentrionum regiones frigidas, non modo non laborant immutatione loci valetudinibus sed etiam confirmantur."

General Ricotti's *caveat* as to Signor Crispi's African policy does not seem to have convinced the Italian Opposition. As to the outside world, there is surely nothing but gain to be anticipated from the opening up of the Abyssinian hill country, and, as a necessary consequence from the establishment of health-resorts in a region so accessible from the Red Sea, and so available for the European in his journey to or from India, China, or Japan.

SANITATION IN BARRACKS.

LAST WEEK Surgeon-Major Notter, Professor of Military Hygiene in the Army Medical School at Netley, delivered a lecture at the United Service Institution on the Sanitation of Barracks. He pointed out the necessity for a careful selection of the site for barracks, and especially the danger of building them on artificial or made ground. When a suitable site has been selected it is of importance to drain it efficiently, and to place a layer of concrete under the building to render it impervious to the soil-air and to damp. He thus summarised the chief points requiring attention. "That the ground be suitably situated and sufficient for the number of troops who are to occupy it. That the drainage and sewerage arrangements can be easily and effectually carried out. That the surface can be drained so that no water can lodge in or near the site, and that storm waters can be carried off without difficulty. That the water-supply is good and sufficient for drinking, cooking, and washing purposes." He also called attention to the necessity for no overcrowding and for ample ventilation, and gave a table showing the density of population authorised by the Regulations for Encampments. The importance of Government acquiring a right to regulate the number and class of houses to be built in the immediate vicinity of barracks was shown by the evils resulting from the absence of such a right at Aldershot and the Royal Barracks, Dublin. The lecturer went at some length into the question of the plans of the barracks, the size of the rooms, the lavatories and urinals, the means of preventing damp, the artificial lighting and the warming of the rooms, and the provision of outlets for the foul and inlets for the fresh air. On the importance of adequate cubic space and efficient ventilation, he observed: "In 1839 Sir A. Tulloch and Surgeon-General Balfour pointed out that while the death-rate from phthisis among the civil population at the ages between twenty and forty was 3·4 per 1000, among the Foot Guards it was no less than 14·1 per 1000, and they showed that no other cause than overcrowding could account for this being the case Even thirty years ago consumption killed nearly eight out of every 1000 of our soldiers every year; now it barely kills three. Formerly, two soldiers died of consumption for one civilian at the same age; now, four civilians for every three soldiers. The importance of facts such as these cannot be too widely known, and under no circumstances should any increase in the occupation of barrack rooms be sanctioned, as the space now is barely sufficient to keep men in health." The importance of efficient drainage and the removal of sewage matters was then brought under notice, and the necessity for the systematic testing of all drains, a practice which, if we may judge from the recent disclosure respecting the condition of the Dublin Barracks, has not yet been brought into operation by the barrack department. Dr. Notter very properly objects to the use of disinfectants in barracks, as it should be unnecessary if a proper system of conservancy, and complete disconnexion of the soil, sink, and waste-pipes, were the rule, and attention given to the more general principles of health. In his remarks upon the water-supply, Dr. Notter stated

that he had, in the course of last year, examined sixty-three samples of water sent to Netley for analysis; of these only 24 were good and wholesome, 10 were usable with filtration, and 29 were unfit for use. A practical inference which he draws is that it is almost useless scattering a number of filters through any barracks and at the same time allowing free access to water which is unfit for use unless it has first passed through them. We fully concur with the claim made by the lecturer on behalf of the Army Medical Service, that "during later years we have waged war with a sanitary success wholly unparalleled in the long history of armies, and I think I shall not be asking too much when I put in a claim on the part of the Army Medical School to a considerable share in the good cause of promoting sanitary progress."

SANITATION IN THE KITCHEN.

SOCIETY is under too great an obligation to the *cordon bleu*, especially the Parisian *cordon bleu*, to remain indifferent when his grievances are brought before the public. Doubtless, many persons have been moved with a feeling of uneasiness and apprehension when, passing by some celebrated restaurant, they have caught an odorous whiff coming from the aperture of an underground kitchen. Prudence has probably suggested the expediency of not making further inquiries. More especially is ignorance bliss where the appetite is concerned. Fortunately, if the public has neglected to show any concern as to the nature and dangers of a cook's work, the cooks themselves are now beginning to speak out, and will no longer allow us to remain in ignorance. In England, the proportion of professional cooks to the population is not so great as in France; for, as a people, we are more accustomed to live at home and to do our own cooking, and this in a very primitive and simple manner. Where an English household is sufficiently wealthy or numerous to employ a professional cook, the kitchen, though situated in the basement, has an area in front, a yard behind, is sufficiently large, well lighted and ventilated, to remain fairly wholesome in spite of the big fires and the cooking. On the other hand, in the centre of large towns, in crowded thoroughfares, the kitchens of our restaurants are more like the places in Paris where, in spite of bad hygiene, those excellent and artistic dishes are produced which have rendered French cooking a model to all nations. All classes in France patronise restaurants more generally than the English; but as our large towns become more and more crowded, as the system of flats replaces the separate house, so are we gradually induced to imitate our neighbours, and resort more extensively to the restaurant. Consequently the grievances which are now being brought to the notice of the French public cannot fail to find an echo on this side of the Channel.

The Parisian professional cooks have constituted a Mutual Benefit Society, and this association has recently presented a report to the Paris Municipal Council, embodying some important statements made by Dr. Regeard, whose services have been retained by the cooks. Dr. Regeard urges that hardly a day passes but that he receives complaints from his clients concerning the defective installation of the kitchens where they work. They are in reality often unfit for human beings to enter. Placed underground, they only receive air from small windows on a level with the ceiling. These are often hermetically closed because the neighbours complain of the smells that escape therefrom. If they are opened, they let down a cold draught which is more than the cooks, overheated by the fires, can endure. Other kitchens open out into little backyards that are so small, damp, and foul that such ventilation is perhaps more injurious than beneficial. Many of the kitchens or the larders are in direct communication with the closets. Sometimes, Dr. Regeard states, the cooks are not allowed, during the busy part of the day, to go to the closets, when these, being further removed from the kitchen, can only be reached by crossing another room. In that case, the cooks generally utilise the tins in which preserves are kept. In some kitchens there are boxes where all the leavings and waste are thrown. This, in the heat of the kitchen, soon ferments, and gives off insupportable odours.

If a cook desires to join the Mutual Benefit Society, and he is more than twenty years old, he has to pass a very severe medical examination, because there are so many infirmities to which cooks are especially liable. Formerly no one suffering from hernia or varicose veins was admitted, but as these complaints are so very frequent, it has been found necessary to relax this rule, and thus the membership of the society has been greatly increased. It is to be remarked that these professional ailments occur exceptionally early in life, generally before the cook has reached his twenty-fifth year. This is explained by the fact that to become a cook something like ten years' apprenticeship is necessary. Beginning work in an unwholesome kitchen while yet but a boy, the cook soon grows lymphatic, and is easily the victim of his trade diseases.

The report on the great prevalence of disease among cooks is so emphatic, and the facts are so well established, that the Municipal Council has drawn up a set of rules which it is proposed to apply to the kitchens of all restaurants, eating-houses, and similar establishments. These rules stipulate that the smallest kitchens shall measure at least 10 ft. by 8 ft. square and be 9 ft. 4 in. high. A free passage of 5 ft. must exist in front of the fire. The tables on which the dishes are prepared must be fixed to the ground, so that they may not encumber the free space by being moved about. The kitchens must have openings giving either on to the street or on to a yard, measuring not less than 20 ft. square. The natural light obtained from the windows must be sufficient for the cooks to work during the daytime without having to light the gas. When it is necessary to burn gas in the daytime the burners must be at least 6 ft. 8 in. above the floor. Another rule is to the effect that all kitchen water must at once be discharged into the sewer, or, in the absence of a sewer, into the street gutter, and that a syphon must be placed in the pipe used for this purpose. This will be a great and a very beneficent innovation in France. No cellar or basement kitchen will be allowed unless its floor is above the level of the street sewer, so that the kitchen can be properly drained. The larder must be isolated from the kitchen in such a manner that the hot air from the kitchen cannot enter the larder, which should ventilate exclusively into the yard or street. No urinal or closet, and no cellar containing a portable closet pail, *tinette*, or *fosse mobile* shall be allowed in the immediate proximity of the kitchens, and all such closets must be provided with a proper water flush, good traps, and ample light and ventilation. Kitchens, sculleries, and larders must not contain any stone or other opening into the cesspool; nor may any pipe leading to the cesspool pass through the kitchens, &c.

The application in Paris of such rules would bring about an immense improvement, and not only prolong the life of the cooks, but would be of very considerable benefit to those who eat the dishes they prepare. Unfortunately the kitchens are so constructed, and the thought of applying even such rudimentary principles of hygiene is so foreign to the minds of restaurant proprietors, that we fear the good intentions of the Paris Municipal Council will not easily be realised. These restaurants, especially those of the better class, are frequented very largely by English visitors; and if here and there a customer would inquire from the *maître d'hôtel* as to the condition of his kitchen, and show some concern on this matter, such questioning, in time, would produce a good effect. It would not be difficult, for instance, to ask if the new regulations, proposed by the Paris Municipal Council, have yet been put in force, and whether the restaurant keeper considers they are good rules and easily applicable. In many restaurants the manager comes round to each table and politely inquires whether everything is to the diner's taste. This supplies a good opportunity for such conversation. The purchaser, the consumer, in the long run gets what he requires, and if the public eats food prepared in a vile atmosphere and in revolting proximity with open drains, it is simply because the public has not taken the trouble to demand that greater care should be shown in the organisation of the kitchens. Now, at last, the cooks themselves, who have suffered more than the public, have entered their protest, and seem disposed to reveal the secrets of the kitchen. These, it is to be hoped, will create sufficient alarm to ensure prompt action. If all that glitters is not gold, so also a succulent meal, artistically cooked and of excellent flavour, is not necessarily either clean or wholesome.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Bedford Urban District.—Dr. Prior has the satisfaction of showing a steadily declining death-rate from 17·8 per 1000 in 1885 to but little over 13 during the past two years. Diphtheria and enteric fever caused 6 and 5 deaths respectively, but the latter were all amongst strangers to Bedford, and occurred in the fever hospital or the infirmary. The former were associated with 3 deaths from croup; and, recalling the history of Bedford as to diphtheria, Dr. Prior is glad that "membranous croup" will henceforth be one of the notifiable diseases. The adoption of notification is expected to affect the hospital question; and although it is regarded that Bedford, with its present provision, is not actually badly off, yet joint action between the urban and rural authorities is again recommended in this respect. In referring to the fever hospital and its anticipated larger use for scarlet fever, Dr. Prior states that the authorities of the fever hospital have dedicated the whole of their upper floor to the reception of scarlet fever cases. It is to be hoped that access to that upper floor is wholly by an outside staircase; for the attempt to use one floor of an ordinary hospital for one disease and another floor for another has again and again not only failed, but actually led to the dissemination of infection; and it is certainly not isolation in the sense in which sanitary authorities are expected to apply that term.

Bedford Rural District.—In the rural area Dr. Prior calculates the general mortality at 17·37 per 1000. Diphtheria, unfortunately, still clings to this district, although it is to a large extent dormant. Its persistence is attributed to the continuance of trivial cases of throat ailment, the true nature of which is not apprehended; to school attendance whilst such cases exist at home; to the want of complete measures of disinfection; to lack of isolation; and to the maintenance of insanitary conditions affecting water-supply and drainage. Some of these conditions can be met by the authority; and it is satisfactory that the hospital question has been raised, and that progress in such matters as water-supply is reported. Enteric fever is also discussed by Dr. Prior, who adduces facts which seem to show that there are conditions under which this disease tends to spread, when communication, direct or indirect, is held with the sick. Some of the places where the disease has occurred stand in much need of amendment as regards drainage.

Melton Mowbray Rural District. — Mr. W. Tibbles announces a death-rate of 12·3 per 1000 during 1889, and this with a marked diminution in the epidemic diseases. The sanitary state of the district is held to be pretty good, but this is rather faint praise when coupled with the suggestion that the evidence of it lies in the small mortality. Indeed, examination of the details of the report shows that there prevail, to a by no means inconsiderable extent, precisely those conditions under which at any moment very serious mortality, and this from preventable causes, is likely to arise; and Mr. Tibbles does well to refer to them in unmistakable terms. Thus, we read of houses overcrowded, ill-lighted, and ill-ventilated, of much bad water, wells contaminated with sewage and unfit for drinking, in a number of localities; of bad and defective drains; and even when conditions dangerous to health have been reported on, they have not, as in Upper Boughton, been dealt with till after preventable disease has subsequently followed. But some advance is being made, although the reader hardly needs to be told that it does not proceed very rapidly. Much systematic work is needed, and the authority had better not be too much influenced by the existence of a small annual death-rate pending the retention of so many causes of disease and death.

Barnsley Rural District.—When the rural authority of this district commenced their work the annual death-rate was from 25 to 27 per 1000; now it is 18·6 per 1000, and even this latter rate needs further reduction before the district can be regarded as a healthy one. Rather more than a quarter of the inhabitants have a good water-supply, over a third have a safe but a hard supply, and another third must be considered as inadequately provided for. The greater part of the district has also been sewered, although sewage disposal is less advanced. The removal of refuse is carried out by contractors in seven-tenths of the district, but the practice is elsewhere less efficient than when undertaken by the authority themselves. Whilst, therefore, Dr. M. T. Sadler has some matters on which to congratulate his authority, his report shows that there is still plenty of sanitary work to be done. Fortunately the plans of new dwellings are carefully looked into, and Dr. Sadler feels sure that the houses are now being so erected that if enteric fever appears it will not be the result of faulty constructive arrangements affecting human dwellings.

Brighton Urban District.—Dr. Arthur Newsholme reports statistics of a very favourable character for Brighton during the past year. The general death-rate was 15 per 1000, a lower rate than any heretofore recorded. The rate from the seven principal zymotic diseases was also one of the lowest on record, and comparison of the second with the first half of the past decennium is greatly in favour of the more recent period. Indeed, if the present system of notification, which is voluntary, could only get rid of those cases concerning which the information comes "too late to enable efficient precautions" to be taken, then Brighton would have little more to do in this matter than amend in the future its somewhat deterrent-looking isolation hospital. The statistical part of Dr. Newsholme's report is, as might have been expected, excellently compiled, and he also gives some valuable hints as to future work in that part of his report dealing with the current measures of improvement which have been adopted. He sets out anew the requirements of a healthy house, and his first point is one that is perhaps less thought of than the others; for whilst people seem alive to failures of drainage &c., they think much less of the important influence on health of a house that is "free from damp, well lit, and ventilated." On the whole, it is evident that such work as is in progress in Brighton all tends in the direction of making the town more healthy and more conducive to long life.

Watford Urban District.—Watford town had, according to Dr. Brett, a death-rate of 13·6 per 1000 last year, and there was an absence of any serious epidemic disease. But the joint isolation hospital, imperfect as it is, did some good service, and doubtless contributed to this end. No special work seems to have been carried out during the year, but it is evident that the current measures of improvement need to be maintained, and though it may be difficult to say, as regards some of the house accommodation, that it is actually injurious to health, yet it seems certainly to be of such a character as to bring it within the scope of those powers which are possessed by urban sanitary authorities; and as such it is deserving of the attention of the Watford Local Board of Health.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6174 births and 3892 deaths were registered during the week ending April 19th. The annual rate of mortality in these towns, which had been 19·3 and 20·6 per 1000 in the preceding two weeks, further rose last week to 20·9; the rate was 19·0 in London and 22·5 in the twenty-seven provincial towns. During the first three weeks of the current quarter the death-rate in the twenty-eight towns averaged 20·3 per 1000, and was 1·7 below the mean rate in the corresponding periods of the ten years 1880–89. The lowest rates in these towns last week were 10·8 in Leicester, 14·7 in Nottingham, and 16·0 in Blackburn and in Cardiff. The rates in the other towns ranged upwards to 28·8 in Newcastle-upon-Tyne, 30·0 in Manchester, 31·6 in Sheffield, and 34·7 in Bolton. The deaths referred to the principal zymotic diseases, which had been 351 and 368 in the preceding two weeks, further rose last week to 420; they included 176 from whooping-cough, 116 from measles, 43 from scarlet fever, 36 from diphtheria, 27 from diarrhœa, 22 from "fever" (principally enteric), and not one from small-pox. No death from any of these zymotic diseases was recorded during the week in Huddersfield, while they caused the highest death-rates in Salford, Bolton, Brighton, and Derby. The greatest mortality from whooping-cough occurred in Derby, Oldham,

and Brighton; from measles in Birmingham, Wolverhampton, Liverpool, and Derby; from scarlet fever in Manchester; and from "fever" in Norwich. The 36 deaths from diphtheria in the twenty-eight towns included 17 in London, 4 in Liverpool, 4 in Salford, and 2 in Manchester. No death from small-pox was registered in any of the twenty-eight towns. Six cases of this disease were under treatment in the Metropolitan Asylum Hospitals, and not one in the Highgate Small-pox Hospital. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 1107 at the end of last week, somewhat exceeding the numbers on recent Saturdays; the new cases admitted during the week were 83, against 86 and 88 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 296 and 384 in the preceding two weeks, were last week 380, and one below the corrected average. The causes of 76, or 2·0 per cent., of the deaths in the twenty-eight towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Newcastle-upon-Tyne, Bradford, and in seven other smaller towns. The largest proportions of uncertified deaths were recorded in Liverpool, Salford, Oldham, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had steadily declined in the nine preceding weeks from 28·7 to 22·8 per 1000, rose again to 26·0 in the week ending April 19th, and exceeded by 5·1 that which prevailed during the same week in the twenty-eight English towns. The rates in the eight Scotch towns ranged from 16·4 and 21·3 in Greenock and Paisley to 26·6 in Perth and 29·8 in Glasgow. The 674 deaths in the eight towns showed an increase of 83 upon the number in the previous week, and included 41 which were referred to measles, 31 to whooping-cough, 13 to diarrhœa, 6 to scarlet fever, 5 to "fever," 5 to diphtheria, and not one to small-pox. In all, 101 deaths resulted from these principal zymotic diseases, against 105 and 96 in the preceding two weeks. These deaths were equal to an annual rate of 3·9 per 1000, which exceeded by 1·6 the mean rate last week from the same diseases in the twenty-eight English towns. The highest death-rates from these diseases last week were 4·4 in Glasgow and 6·0 in Leith. The 41 deaths from measles corresponded with the number in the previous week, and included 21 in Glasgow, 8 in Edinburgh, 4 in Dundee, 4 in Aberdeen, and 4 in Leith. The fatal cases of whooping-cough, which had been 33 in each of the preceding two weeks, declined last week to 31, of which 13 occurred in Glasgow, 7 in Aberdeen, 6 in Edinburgh, and 3 in Leith. The 13 deaths attributed to diarrhœa showed an increase upon recent weekly numbers. The 6 fatal cases of scarlet fever included 3 in Glasgow and 2 in Leith; while of the 5 deaths from "fever," 2 occurred in Glasgow and 2 in Paisley. The deaths referred to diseases of the respiratory organs in the eight towns, which had been 141, 130, and 126 in the preceding three weeks, rose last week to 154, and exceeded by 14 the number returned in the corresponding week of last year. The causes of 65, or nearly 10 per cent., of the deaths in the eight towns were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 26·6 and 24·5 per 1000 in the preceding two weeks, rose again to 26·5 in the week ending April 19th. During the first three weeks of the current quarter the death-rate in the city averaged 25·9 per 1000, the mean rate for the same period being 18·3 in London and 23·3 in Edinburgh. The 179 deaths in Dublin last week showed an increase of 13 upon the number in the previous week; they included 2 which were referred to whooping-cough, 2 to "fever," 1 to measles, and not one either to small-pox, scarlet fever, diphtheria, or diarrhœa. Thus the deaths from these principal zymotic diseases, which had been 17 and 7 in the preceding two weeks, further declined last week to 5, and were fewer than in any previous week of this year; they were equal to an annual rate of 0·7 per 1000, the rate from the same diseases being 2·6 in London and 3·7 in Edinburgh. The fatal cases of measles, and of whooping-cough in Dublin were fewer than in any recent week; and the deaths from "fever" were considerably below the average. Four inquest cases and 5 deaths from violence were registered; and 66, or more than a third, of the deaths occurred in public institutions. The causes of 21, or nearly 12 per cent., of the deaths in the city were not certified.

THE SERVICES.

ARMY MEDICAL STAFF.—Surgeon-Major William Hill Climo, M.D., ranking as Lieutenant-Colonel, to be Brigade Surgeon, vice J. Fleming, M.D., F.R.C.S. Edin., retired (dated March 19th, 1890); Surgeon-Major William Fredk. Samuels retires on retired pay (dated April 23rd, 1890); Surgeon Victor Edwin Travers-Smith, M.D., resigns his commission (dated April 23rd, 1890). The Christian names of Surgeon Franklin are Denham Francis, and not as stated in the *Gazette* of Sept. 3rd, 1880.

INDIAN ARMY.—Brigade Surgeon David John McCarthy, M.D., Madras Medical Establishment, has been transferred to the half pay list (dated April 5th, 1890).

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon James Dunlop, M.D., has been placed on the retired list of his rank at his own request; Staff Surgeon Bernard Renshaw has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet (dated April 9th, 1890); and Staff Surgeon John Allan Robertson has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet (dated March 30th, 1890).

The following appointments have been made:—Surgeon William E. Home to the *Thrush* (dated May 6th, 1890); Mr. John J. H. Lealy to be Surgeon and Agent for Courtmacherry; and Mr. Douglas D. C. Menzies to be Surgeon and Agent for North Queensferry (dated April 23rd, 1890).

VOLUNTEER CORPS.—*Infantry:* The Manchester Brigade: Surgeon and Surgeon-Major John Armstrong, 5th Volunteer Battalion, the Manchester Regiment, to be Brigade Surgeon, ranking as Lieutenant-Colonel (dated April 23rd, 1890).—*Artillery:* 2nd Kent: Surgeon-Major R. Gooding (transferred from the 1st Kent Artillery Volunteers) to be Surgeon-Major (dated April 1st, 1890).—1st Cinque Ports (Eastern Division, Royal Artillery): Acting Surgeon W. L. Chubb (transferred from the 1st Kent Artillery Volunteers) to be Acting Surgeon (dated April 1st, 1890).—2nd Cinque Ports (Eastern Division, Royal Artillery): Surgeons-Major R. C. N. Davies and A. R. Ticehurst to be Surgeons-Major (dated April 1st, 1890); Acting Surgeons C. Ashenden, F. M. Wallis, and F. H. Shaw to be Acting Surgeons (dated April 1st, 1890). The above-named Officers are transferred from the 1st Cinque Ports Artillery Volunteers, and will be considered to have received commissions of the same rank and date as those previously held by them in the 1st Cinque Ports Artillery Volunteers (Eastern Division, Royal Artillery).—1st Midlothian: Surgeon-Major A. M. Sanderson resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Corps on his retirement (dated April 19th, 1890).—*Rifle:* 1st Lanarkshire: The undermentioned Surgeons to be Surgeons-Major (ranking as Major):—J. W. Anderson, M.D. (dated April 19th, 1890); J. Whitson, M.D. (dated April 19th, 1890); and Acting Surgeon J. A. Adams, M.D., to be Surgeon (dated April 19th, 1890).—6th (Fifeshire) Volunteer Battalion, the Black Watch (Royal Highlanders): Acting Surgeon J. Mackay to be Surgeon (dated April 19th, 1890).—3rd (the Blythswood) Volunteer Battalion, the Highland Light Infantry: Acting Surgeon R. Pollok, M.B., to be Surgeon (dated April 19th, 1890).—1st (Renfrewshire) Volunteer Battalion, the Princess Louise's (Argyll and Sutherland Highlanders): James Bunton Barr, M.B., to be Acting Surgeon (dated April 19th, 1890).

ARMY MEDICAL RESERVE OF OFFICERS.—The undermentioned Surgeons, 3rd London Rifle Volunteer Corps, to be Surgeons-Major, ranking as Majors (dated April 23rd, 1890):—George Hastings and William Tickle Whitmore, F.R.C.S. Edin.

PETWORTH COTTAGE HOSPITAL.—This institution maintains its usefulness and prosperous career. The number of patients admitted during the past year was twenty-seven. The total income amounted to £229 13*s.* 2*d.*, and the expenditure to £167 10*s.* 8*d.*

Correspondence.

"Audi alteram partem."

THE UNIVERSITY OF LONDON.

To the Editors of THE LANCET.

SIRS,—Since I last addressed you upon the subject of the reconstitution of the University of London, in January of this year, the question has passed through several phases, and it is by no means certain that the scheme of reform at present in hand has surpassed the plastic state.

The Royal Commission was appointed in May, 1888; it reported in May, 1889; and on Nov. 20th in the same year the Senate formulated a scheme, drawn upon the lines of the Commission Report, as a basis of conference with University and King's Colleges, the two Medical Colleges, and the two legal bodies. This scheme, in consequence of a resolution moved by me in Convocation in January last, and carried *nem. con.*, was circulated among members of Convocation. This is the only intimation up to the present time that Convocation as a body has received respecting the proposed changes which so vitally affect the welfare of the University. When I moved this resolution (which merely endeavoured to secure that Convocation should have that reasonable time for consideration which the Commissioners had humbly recommended to Her Majesty as desirable) I was told it was premature. One thing is certain, that if in January last it was premature for Convocation to discuss the draft scheme, with a view to secure modification thereof in accord with its own desires, it is now too late to hope for any such fruitful result. It is common knowledge that the Senate, in deference to the representatives of University and King's Colleges, have departed widely from their scheme of November last, and have in so doing not only failed to satisfy the metropolitan teachers, but have scandalised the provincial colleges and gravely imperilled the chance of passing their scheme through Convocation. Moreover, it is officially stated that the Senate, while conferring repeatedly with outside colleges and corporations, will not submit to Convocation its final scheme until this has passed beyond the possibility of modification. Convocation, we are told, must take it or reject it *en bloc*. It is true that on two occasions a committee of the Senate has received a deputation from the special committee of twenty-five appointed by Convocation in 1885 to reconsider Lord Justice Fry's earlier scheme; but this committee's appointment and reappointment were, as I have repeatedly pointed out, antecedent to and independent of the intervention of the Royal Commission. This being the case, the members of this committee have no authority to inform the Senate of the wishes of Convocation in respect of the new draft scheme based on the Commission report, except in so far as the scheme adopted by Convocation in June, 1886, along with other resolutions passed by Convocation from time to time, agree with or conflict with proposals therein contained.

Happily, at the May meeting of Convocation this special committee of Convocation will present an interim report, and upon motion to receive this report the whole question of the reconstitution of the University can, and no doubt will, be raised. Convocation has already expressed itself emphatically upon two essential points: (1) against the conferment of special privileges upon metropolitan to the detriment of provincial colleges; and (2) against lowering the standard or lessening the scientific character of the medical degrees. Convocation is in these two points in complete accord with the words of the noble Chancellor, who said, amid loud applause: "We object to lowering the high character of our degrees, and we cling to the imperial character of the University." To cede these two points is to revoke the past work of the University, and I feel sure there are many with the best interests of higher education at heart who yet feel that it is possible to purchase the co-operation of the London Colleges at too great a sacrifice.

I am, Sirs, yours truly,

W. J. COLLINS.

Albert-terrace, Regent's-park, April 21st, 1890.

ALBUMINURIA AND LIFE ASSURANCE.

To the Editors of THE LANCET.

SIRS,—Professor Fraser has undoubtedly done good service in once more directing attention to the question of albuminuria and life assurance, since few more difficult problems are presented to the medical officer of an assurance company than those connected with the presence of albumen, but I venture to think that his concluding remarks are open to criticism.

In reporting upon any case of albuminuria it is, I believe, essential that the medical examiner should himself form some conclusions as to the cause, and this point is practically conceded by Professor Fraser in his threefold division, which is certainly useful, although the first two classes really present no difficulties, since the first class, dependent upon renal disease, must necessarily be regarded as uninsurable at the ordinary rates, while the second class comprises numerous easily recognised conditions which would in themselves lead to the rejection of the proposal almost independently of the trace of albumen. The third class is the only one in which real difficulty arises, and here it appears to me that the precautions advocated by Professor Fraser are open to adverse criticism. They might perhaps be applicable when the medical examiner is also the medical attendant of the proposer; but this condition is, if possible, avoided by most companies, who prefer having, if necessary, separate reports from the medical attendant and from some medical man who has specially made an examination upon their behalf. Professor Fraser directs that where only a small quantity of albumen is detected, unassociated with any evidence of important disorder in health, "the urine should be re-examined on two or three consecutive days, the examined urine being on each occasion a sample of the total urine of the twenty-four hours mixed together"; and he adds, "if no albumen be found on any of these subsequent examinations, the proposal might, I think, be accepted at ordinary rates." To this course there are two very strong objections. In the first place, the proposer is necessarily informed of the physical condition to which exception has been taken; and secondly, as the examined urine is to be a sample of the urine of the twenty-four hours mixed together, there is absolutely no guarantee that it it has been passed by the proposer. Implicit trust must be placed in his assertion that the specimen he brings for examination has been passed by him. In a purely business matter, in which he may have much to gain and little to lose, this seems to me to be scarcely sufficiently satisfactory. I do not wish to raise here any question concerning the existence or the importance of physiological, functional, or cyclical albuminuria or the albuminuria of adolescence; but for the purposes of life assurance it is certainly most desirable that the urine examined should be passed in the presence of the medical examiner, and that no report should ever be made upon samples which have been brought or sent.

Professor Fraser throughout his paper seems inclined to delegate the acceptance or rejection of the proposals to the medical examiners. Surely this is scarcely their function. Their services are generally considered to commence and end with an accurate record of observed conditions. Much might be gained from uniformity of action in testing, but in the doubtful class of cases of slight albuminuria very valuable information could be gleaned from a brief record of the tests employed, together with notes indicating the specific gravity, the colour, &c. of the urine. Upon these data directions for re-examination, after an interval, if necessary, should be issued by the chief medical officer of the company, with whom practically all responsibility rests.

I am, Sirs, yours faithfully,

NESTOR TIRARD,

Chief Medical Officer of the Sun Life Assurance Company.

Weymouth-street, Portland-place, W., March, 1890.

HYPNOTISM AS AN ANÆSTHETIC.

To the Editors of THE LANCET.

SIRS,—I received this morning a marked copy of THE LANCET drawing my attention to this subject, perhaps because in 1885 I published some notes of an experience of tooth extractions under mesmerism at the hands of Mr. Kershaw, in Nottingham, in the journal of the British Dental Association. My experience of the suc-

cessful character of the anæsthesia induced quite coincides with the report of the cases operated upon at the house of my friend Mr. Carter of Leeds, but my conclusions were decidedly adverse to its general employment in our surgeries for several reasons, which I would venture strongly to urge upon those who may be disposed to dabble in this mysterious force. 1st. Its non-applicability to every patient. I sent Mr. Kershaw a girl of sixteen to mesmerise, and he could not influence her one bit. The only cases I operated on were persons who had been under his influence for some time. He admitted candidly that many persons were intractable, and that it took him months before he could bring on this somnolent condition in others. Supposing a patient needed several aching teeth extracted, this would be, to say the least, inconvenient. 2nd. Mesmerism seems to demand in the patient a weakened nervous constitution. The persons most susceptible, who perform at the will of the operator the most ludicrous and disgusting antics on the platform, are men and women of a low nervous and intellectual type, and mesmerism certainly must be a great shock to their nerve organisation, and also to their moral force, since they feel and know they are completely at the mercy of some man should he be near, or, as in the case reported of Dr. Milne Bramwell, should he even write a letter or send a telegram. The anæsthesia of chloroform, ether, or gas passes away, and there is no fear of its repetition without the deliberate act and consent of the patient; that of the once mesmerised may recur, and the very imagination that it may must be a constant terror to the understrung patient. Dumas, in his "Memoirs of a Physician," fully describes this in the tyrannous control that Acharat or Joseph Balsamo had over his victim Lorenza. 3rd. I hold it would be very injurious to the practice of any medical man or dentist to have the power of mesmerising his patients, or be thought to have it. Dr. Elliotson, of University College Hospital, ruined himself by it, and I fear very much that the tongue of slander would not spare us in this generation. In the sixth volume, p. 124, of the *British Dental Association Journal* will be found an able letter from "Psychologist," offering objections of a more scientific character than mine. It is no new thing, as in THE LANCET of June, 1870, p. 841, it will be found that a committee of physicians and surgeons of eminence was formed to investigate experiments conducted by Dr. Esdaile in India, and the operations were quite successful, and of a very much more serious and extensive character—amputations of thigh, scrotum, &c. I confess these manifestations are exceedingly interesting, and at first sight seem to indicate a discovery of great value in the world of anæsthetics; but I trust the profession will halt in its opinion until it has studied the question all round. Apologising for the length of this communication,

I am, Sirs, yours faithfully,

HENRY BLANDY, L.D.S. Edin.

Nottingham, April 10th, 1890.

THE OBSTETRIC BINDER.

To the Editors of THE LANCET.

SIRS,—Your correspondent of last week on the use of the obstetric binder lays down some dogmatic rules with which I cannot entirely agree. With all due respect to his experience, I think out of it he formulates for himself theories, not facts. At the same time it appears to me that the general practitioner, having to deal with all kinds of obstetric cases, is far more likely to come to a correct conclusion about the matter than anyone else.

During a practice of over fifteen years in a Lancashire town, where the practice of midwifery is one of the main branches of our profession, and with a record of over 3000 cases, comprising all descriptions, I only missed applying the binder once, and I have regretted it ever since. Whether or not this woman's after troubles, such as pendulous abdomen, prolapse, &c., did arise from its non-application I cannot say, but there is no doubt in the woman's mind and in the minds of her immediate relatives that it was so. A great deal of this may be prejudice; at the same time the fact remains. Unfortunately about that time I had been reading just such another discussion as the one which took place at the Obstetrical Society's meeting, and, having been taught to bow to authority, did so—and fell.

Mr. Burton says: "The only cases in which the binder should be used during labour are those occurring in women with pendulous abdomens." My experience teaches me that the binder should in these cases be worn continuously during the latter months of pregnancy, during the whole of the labour, and for two months afterwards. Assuming the correctness of Mr. Burton's deductions in the remainder of his letter, he need not apply the binder even in cases of pendulous abdomen, for in nine cases out of ten by placing the parturient woman on her back the position of the uterus will be restored. Contrary to Mr. Burton's plan of removing the binder when the head engages the brim, I believe this is when the binder is beginning to be specially useful. The practice I have followed for many years with the best results has been to apply the binder before the head engages the brim, to keep it on the whole time, tightening it after expulsion of the child and again after expulsion of the placenta and membranes. I am confident that post-partum hæmorrhage has been reduced to a minimum by this practice. Undoubtedly the involution of the abdominal parietes and uterus will go on after labour without it, but these changes will go on more efficiently and quicker with pressure carefully applied. With regard to the sudden lowering of intra-abdominal pressure, the binder certainly comes too late when it is applied after the birth of the child, but then this is why it should be applied earlier. On the uterus itself I believe the binder not only aids the organ to return more quickly to its normal position, but also aids very materially the process of involution, preventing subinvolution and its attendant evils; that this pressure also aids the ligaments to contract to their normal length there can be no doubt. It is not a question so much of improving the figure as that the abdomen, with its contents, should return to the condition it was in prior to pregnancy. I cannot believe with Mr. Burton that a great deal of habit and fancy governs the comfort of the patient, but even if it does it ought to be allowed. The argument of German women recovering without being bound is in itself nothing. The German women I have known who have tried both plans elect to have the binder, and attribute their pendulous abdomens to the absence of it. The too early getting up which Mr. Burton speaks of would, in all probability, not have produced pendulous abdomen if the binder had been properly applied. German women do not get up any earlier than our English artisan's wife. They get up soon enough in Lancashire, but there does not seem to be a greater preponderance of pendulous abdomens. The conclusion I have come to from my experience is that the binder should be applied from the beginning of labour and continued during the whole time, that it should be tightened after expulsion of the head, and again after expulsion of the afterbirth. By these means I believe labour is aided, the detachment and expulsion of the placenta in a shorter time attained, hæmorrhage prevented, and the dangers of the lying-in state reduced to a minimum.

I am, Sirs, your obedient servant,

ALFRED CHADWICK, M.D.

Birkdale, Southport, April 20th, 1890.

WARNING TO WHOLESALE CHEMISTS.

To the Editors of THE LANCET.

SIRS,—Some time ago one of my patients complained of an eruption of boils following upon the application of a fly blister for pleurisy, with a little effusion. I suspected the fly blister as the probable cause, but took no steps. Recently, however, one of my lady patients complained of a similar sequela, and seeing that the boils in the first place were grouped thickly round the site of the plaster, and then scattered diffusely, though larger in size, at some distance from the seat of irritation, I at once concluded, seeing that the same chemist had supplied both plasters, that a process of inoculation had been carried on, and that the plaster was the cause. The question naturally rose, Since emplastrum lyttæ is a mere mixture of powdered flies with melted beef suet, was it the fly powder or the melted fat that gave origin to the boils? I inquired of the chemist whether he prepared the plaster material himself or obtained it from a wholesale house. If he had prepared it himself the probability was that only a small quantity of fat was manipulated with, and was likely to have been obtained pure; but if from a wholesale house I knew it is customary to prepare one or more hundredweights at a

time, and that the suet was likely to be procured from a tallow merchant. If so, the fat was most likely to be impure, especially as, in these days of competition, the question is where can one buy cheapest? Why should the tallow be impure if bought in large quantity? Because at our public abattoirs or slaughterhouses all animals which are diseased or parts of animals which are diseased are condemned, and are boiled down for the sake of the tallow. Hence arises a fertile source of infection, for if tallow be boiled long it tends to become readily rancid; and if it be not boiled very long the germs of disease are not destroyed, and may spread if a suitable nidus be found. What a capital chance for the microbe if made into a fly blister—the flies irritate and vesicate the skin, and the microbe flourishes. Remembering all this, I went to the chemist who sold the plaster, taking with me a tube of sterilised nutrient fluid and a platinum wire. I explained matters to the chemist, and heated the platinum wire red hot. When cool I passed it through the plaster, and as there was a tiny loop at the end of my wire, it dragged a tiny portion of plaster with it. Turning the tube of nutrient material upside down I withdrew the pledget, which acted as a stopper, passed the wire up through the jelly, and reinserted the plug. The chemist labeled the tube. In three days thereafter, having kept this tube in an incubator at a temperature of 99° F., we had a beautiful crop of micrococcus pyogenes aureus, or staphylococcus pyogenes aureus of Rosenbach. The jelly became fluid, an orange yellow culture covered the surface, ultimately falling to the bottom of the tube. A drop on an öse placed under an immersion lens of a microscope showed the micrococcus in huge numbers, together with a few of two other forms whose names I am not yet acquainted with. Thus one proved satisfactorily that the plaster could give rise to the particular micrococcus which causes furunculi, or boils; and my theory abovementioned is the most likely one of explaining how these microbes came there.

It behoves wholesale chemists, therefore, to take heed where they get their tallow to prepare fly blisters with, else after this observation a case of damages may not unnaturally be laid against them.

I am, Sirs, your obedient servant,

Edinburgh, April 17th, 1890. HAMILTON WYLIE.

BRITISH NURSES' ASSOCIATION.

To the Editors of THE LANCET.

SIRS,—My attention having been called to several reports of a meeting of the British Nurses' Association said to have been presided over by "Dr. Andrew Clark," and being the only person in the Medical Directory entitled to that designation, I request permission to say, in your next issue, that I am not connected with that institution, and that I have never presided over any of its meetings.

I am, Sirs, yours faithfully,

ANDREW CLARK, M.D.,

Consulting Physician, and one of the Lecturers on Clinical Medicine to the London Hospital.

April 21st, 1890.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

The Workhouse Infirmary.

THE new and extensive buildings comprising this institution are now in full operation, and with this completion an estimate can be formed of the vast amount of relief and work it affords. The staff consists of four resident and two visiting medical officers and seventy-nine nurses, and the number of patients for the current week amounted to 1186. Pupil nurses are included in the staff, each of whom pays a fee of £20; at present they are seven in number, the services being given for twelve months. The organisation of the great detail necessary for the administration of so huge an undertaking is admirably carried out, and there exists every convenience which modern knowledge can supply for the comfort and the well-being of the inmates and the various officers connected with it.

Shakspeare's Birthday.

The nearness of this city to the birthplace of the great dramatist gives an interest to the commemoration of this event, which is taken advantage of in recalling his fame. This year the Amateur Dramatic Club was honoured by the presence of Mr. Charles Dickens, who ably upheld the memory of the great English dramatist. The city possesses a Shakspeare library, which includes the writings of over a hundred authors. Among these is to be found a work on the medical men of Shakspeare, by a late Birmingham surgeon, Mr. West, which admirably sets forth the characters depicted by the poet belonging to the medical profession of bygone days.

Street Ruffianism.

An epidemic of brutality has lately spread in our midst, and the strong hand of the law has grasped the aggressors with firmness. Gangs of young villains associate together and become the terror of a neighbourhood. A large number of the cases treated in the hospital are the outcome of these playful fancies on the part of street roughs. It is possible that this city is not worse than others in this respect, but complaints have been made of the leniency with which these cases are dealt with by the magistrates. The infliction of heavy sentences in a few instances will, it is hoped, put a stop to the doings of these desperadoes and ensure peace in the various localities.

Birmingham, April 25th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Handsome Contributions of Newcastle Workmen.

THE workmen of Sir W. G. Armstrong, Mitchell, and Co., Limited, at Elswick, have sent in £327, their quarterly contribution to the various medical charities of this city. Of this, the Royal Infirmary receives, as might be expected, by far the greatest share—viz., £273; and the remainder is distributed amongst the minor medical charities, including £5 5*s.* to the new Surgical Aid Society.

Tynemouth.

The annual report of the Tynemouth Dispensary, read at the meeting held last week, shows that the number of patients relieved by ticket during the year had been 699, and the casuals 4343, being an increase of 735 over the number of last year. During the past year, also, the house surgeon had made 3171 home visits to patients, being 1157 in excess of the number for 1888.—The subject of hair teasing in the Tynemouth Workhouse, referred to in a previous note, and which has been so strongly condemned by the Local Government Board, came up before the first meeting of the newly elected guardians held last week, when the letters of Dr. Brumwell and Mr. Knollys were read, and in the face of their condemnatory nature a motion was carried to discontinue the system—not, however, without resistance, as a strong minority wished it to be retained as an employment for vagrants.

Ambulance Work in the North.

The certificates won by female students in ambulance work, instructed by Mr. Kay, police surgeon (Gateshead), were presented last week by the Countess of Scarborough, who spoke of the pleasure it gave her to aid so useful a work. The class consisted of forty members, twenty-two of whom went in for the examinations.—At Hexham, Mr. Stewart, surgeon, began a second course of lectures on ambulance work, in which he mentioned that he believed that only twelve battalions of our Volunteers had proper ambulance equipment. He also alluded to the fact that the dispensary at Hexham was in a dormant condition; it had funds, he said, amounting to £1300, and bringing in some £30 per annum; that money was simply going on accumulating. He was in favour of providing a visiting nurse for Hexham, to go amongst the homes of the working men, and attend to the sick and injured.—Mr. Clark Newton of Newcastle has held an examination of ambulance students at Seaton Delaval. Twenty-three students presented themselves, and all passed. Mr. Newton intimated that nine of them, third-year students, would receive the medallion presented by the St. John Ambulance Association.

Maryport.

Mr. Spurgin, the medical officer of health for Maryport, says that during the first quarter of the present year the

death-rate had been equal to 30·1 per 1000, but that the zymotic death-rate was low, notwithstanding that scarlatina and whooping-cough had been and were still prevalent. In a supplementary report he recommends the closing for two or three weeks of all Sunday and public schools. It is to be regretted, in the face of this serious illness, that Mr. Spurgin's recommendation was not adopted, but a weak request made instead—that the masters of the schools be told where the illness was, and that they be requested not to admit any scholars from the infected houses. The sanitary authority is apparently not aware that scarlatina may often exist in a latent form and yet the parents be unaware of its presence in their children. Mr. Spurgin's plan was a simple way of testing the health of the children and preventing the dissemination of the disease.

Death of Mr. Mason Watson.

The old pupils of the late Sir John Fife in many parts of the world will be sorry to hear of the death of Mr. Mason Watson, which took place at his residence in Newcastle on Saturday last, in his seventy-third year. The deceased was in Sir John Fife's employment for many years as dispenser, bookkeeper, and factotum. He was a useful man in many ways, and especially kind to the poor. He was long on the committee of the Newcastle Dispensary, and a guardian of the poor; also President of the North of England Microscopical Society for two years, and treasurer for a long period. The cause of his death was a malignant sarcomatous tumour of the angle of the jaw, causing repeated hæmorrhage from the tonsillar branch of the external carotid, which, however, was permanently arrested. The disease, however, progressed, and, losing his power of swallowing, he died from pure exhaustion.

At a recent meeting of the Malton Naturalists' Society, Professor Miall, of the Yorkshire College, Leeds, was elected president, and several eminent men of science were elected honorary members.

Newcastle-on-Tyne, April 25th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

EDINBURGH.

University of Edinburgh Graduation Ceremonial.

THE April Graduation Ceremonial in the University of Edinburgh has more special interest for the Arts, Divinity, and Science Faculties, though it usually happens that the address to graduates, given as it is by one of those specially qualified to speak of educational matters, is looked forward to with interest even by those not specially interested in the list of graduates. As is but fitting where honorary degrees are conferred by a University which has made so much of its reputation through medicine and surgery, medical graduates are usually well represented on the honorary graduation list. This year Sir Dyce Duckworth, M.D., F.R.C.P., and Sir John Kirk, G.C.M.G., M.D., F.R.S., are the recipients of the honorary degree of LL.D. Professor Masson delivered the address to the graduates—an address well worthy of very careful perusal even by those who are not able to see with him eye to eye in all matters. The facts he gave as to the recent increased prosperity in University affairs will astonish even those who think that they are acquainted with the later history of the University; and even the feeling of respect for the honourable past of which Professor Masson spoke is lost in the sense of the extraordinary work that the University is doing at the present. Since the coming into operation of the University of Scotland Act of 1858 there has been a leap from 1500 matriculated students to 3500, increase of funds from £75,000 to £436,790. A new medical school building has sprung up, and the McEwan Hall is rising from the ground; whilst the students, in their anxiety for the honour of their *alma mater*, have formed a Students' Representative Council, and have built a University Union. In regard to the professoriate, Professor Masson takes a somewhat erroneous view of the general feeling about the professoriate and University finances. It is not the general opinion that they have mismanaged or applied to their uses University funds, but it is held that where so much other higher and more important work is waiting to be done by them, the business part of what the professor has nowadays to do might be relegated, even with advantage to the work, to those not directly engaged in teaching and scholastic work. There are good business men amongst the professors no doubt, but they are not appointed to look after the University chest, and others not burdened with professorial work should be able equally well to do the work. The University Commission of course engaged some of the lecturer's attention. The whole address is well worthy of the professor's literary skill and high ethical and moral tone.

The Triple Qualification.

At the recent quarterly examination held by the Royal Colleges of Physicians and Surgeons of Edinburgh and Faculty of Physicians and Surgeons of Glasgow, a somewhat larger proportion of passes than usual is reported for the first and second examinations, but for the final examination the percentage of rejections is high. For the first examination, of forty-six candidates who presented themselves, thirty-three, or nearly 72 per cent., passed. For the second examination, thirty-one out of forty-two passed, or nearly 74 per cent. For the final examination sixty-eight candidates appeared, and of these thirty-two, or only a fraction over 47 per cent., passed.

Edinburgh, April 22nd.

ABERDEEN.

Aberdeen Royal Infirmary.

Dr. Ogilvie Will has addressed a letter to the directors of the Royal Infirmary intimating his resignation of the office of surgeon to the institution. A meeting of the directors will be held to-morrow, when Dr. Will's resignation and the filling up the vacancy in the staff will be considered.

The University.

The summer session at Marischal College was opened yesterday. The attendance at all the classes is large. In his introductory lecture Professor Ogston referred to the retirement of Dr. Ogilvie Will from the surgical staff of the Royal Infirmary. Dr. Will, he said, had been for sixteen years connected with surgical work and teaching, and so formed one of the Medical School, and it was much to be regretted that he had been compelled to sever his connexion with them. It was to be expected, he said, that the managers of the infirmary would continue his connexion with their institution by appointing him consulting surgeon. As an investigator and teacher of urethral surgery, Professor Ogston considered Dr. Will second to none in Britain, and said if a method could be contrived whereby they could retain his teaching of urethral surgery in the University and Medical School, it would be of the greatest possible benefit to the students.

University Legislation.

A meeting of the committee appointed by the Genera Council to investigate and report upon the changes desirable for increasing the efficiency of the University, in so far as the University Commissioners have the power to carry such changes into effect, was held on Saturday at Marischal College. The committee appointed Drs. Beveridge, Mackenzie Booth, Fraser, Garden, Gordon, MacGregor, and Leslie Mackenzie as a sub-committee to consider and report on all questions relating to the Faculty of Medicine.

Health of the City.

During the week ending Saturday, the 19th inst., 124 cases of zymotic diseases were reported to the medical officer of health. There were 42 cases of measles; 3 of scarlet fever; 2 of diphtheria; 4 of typhoid fever; and 73 of whooping cough. In his report for March Dr. Hay states that there was a great increase of cases of zymotic diseases during the month, 398 cases having been reported, as against 234 for February. The increase was due entirely to measles and whooping-cough, and the city is now experiencing a heavy epidemic of the latter disease. The Registrar's returns show that influenza caused eleven deaths in March; the number is the same as in January, but smaller by five than that in February. As in the previous months, the victims, with one exception, were adults; but the duration of the illness was, in the majority of cases, much longer. Six of the cases had a duration of from three to eight weeks.

Unwholesome Food.

During March the sanitary inspector seized 1092lb. of beef, 341lb. of mutton, 1701lb. of fish, and 49lb. of fruit as being unfit for human food.

Aberdeen, April 22nd.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

DUBLIN.

Sentence on a Medical Student.

THE young man Adams, to whose case reference has already been made in these columns, having pleaded guilty to a charge of larceny, was yesterday sentenced by the Recorder of Dublin to two months' imprisonment. Adams was a very distinguished student in the medical school of the University of Dublin.

Royal College of Surgeons in Ireland and the Army Medical Department.

The President and Council have recently formulated certain resolutions and recommendations in reference to the grievances of the Army Medical Department. The Council have also submitted a series of questions relative to the status of the army surgeon, with a view of obtaining an expression of opinion in Parliament as to the reasons why medical officers should be treated in many respects as the inferiors of combatant officers.

Lunatic Asylums Appointments.

His Excellency the Lord-Lieutenant has made the following appointments:—Mr. O'Neill to be Resident Medical Superintendent of Limerick Lunatic Asylum, in the room of Dr. Courtenay, appointed Inspector of Lunatic Asylums; Mr. Hatchell to be Resident Medical Superintendent of Castlebar Lunatic Asylum; and Dr. Edward Moore to be Resident Medical Superintendent of Donegal Lunatic Asylum.

University of Dublin.

A vacancy will in all probability shortly occur in the representation of the University in Parliament, and five candidates are at present in the field canvassing the electors. Mr. Wheeler is the medical candidate, but as the University from time immemorial has been regarded as a close borough for the Crown nominee, who is invariably a lawyer, it is generally thought that a member of the legal profession will, as usual, represent the constituency.

Science and Art Museum, Dublin.

The extensive buildings in Kildare-street, constituting the Science and Art Museum and National Library, Dublin, are now approaching completion, and when finished will deservedly rank among the highest examples of the kind. The Council of the Chamber of Commerce have addressed a memorial to the Lord-Lieutenant, urging that the buildings may be opened with a State ceremonial suitable to the importance of the occasion, so that the public mind, and especially the attention of the mercantile community, for whose benefit these institutions have been mainly established, may be impressed with the importance of the objects which the Science and Art Departments have had in view, and the educational advantages to be derived from all the several branches of the undertaking.

The Medical Officer of the North Dublin Union.

The guardians of the North Dublin Union lately passed a resolution increasing the salary of Mr. Kenny by £50 a year, but the Local Government Board have refused to sanction the arrangement. They state that Mr. Kenny's salary is as high as that of any visiting medical officer of the Dublin, Cork, or Belfast workhouses, and adduce other reasons for refusing to add to the taxation of the ratepayers of the North Dublin Union.

Dublin, April 22nd.

BELFAST.

The Admission of Medical Students to the Workhouse Infirmary.

At a meeting of the Belfast Board of Guardians, held on April 15th, a deputation of medical students was introduced by Dr. O'Neill, and presented a memorial in which it was stated: 1. That it has long been felt to be a very real difficulty in the way of the Belfast medical students that they have not sufficient opportunities for the clinical study of certain diseases. The Royal Hospital is the only general hospital in the city which is open to students; and while that institution is probably unsurpassed in Ireland for the study of accidents and of diseases of the chest, there are several important classes of cases which are not admitted to it in such numbers as to be of any use. 2. That the result is that Belfast students usually find it absolutely necessary to go to Dublin, Edinburgh, or London, to complete their practical education before entering on the practice of their profession. 3. That the Belfast Union Infirmary contains, in large numbers, just those classes of cases (in particular venereal, senile, and obstetrical) which there is not sufficient opportunity of seeing elsewhere in Belfast, and thus if it were open to students the Belfast Medical School would be complete in itself. 4. That the county infirmaries in Cork and Galway are already open to students, and the number of similar institutions in England, which are eighty, has of late largely increased. 5. That in 1877 an arrangement for the amalgamation of the Royal Hospital and the Union infirmary for clinical instruction was agreed to by your board, the medical staff of the Union Infirmary, and the College authorities, and only fell through on account of not satisfying the requirements of the staff of the Royal Hospital. The petitioners pray the Board to allow the Union Infirmary to be opened to medical students as a separate institution for clinical study. The memorial was signed by 180 students. After some discussion, it was unanimously resolved by the Board, "That we hereby consent to open the workhouse infirmary to the students of the Queen's College, Belfast, under certain rules and regulations to be made hereafter by this board, at the same time reserving to our medical officers the right of making such arrangements with the students as they may deem necessary for securing a proper recognition of the services they may be called upon to render."

Death of Dr. Joseph Lightburne.

I regret to have to report the death of Dr. Lightburne of Bessbrook, county Armagh, under very melancholy circumstances. The deceased gentleman, who for over twenty years has been dispensary doctor of the Mullaghglass district of the Newry Union, was awakened early on Saturday, April 12th, by a midwifery case. On reaching the house of his patient, after a time he was observed to fall forwards, and he expired in a few minutes. For some time it had been known he was suffering from heart disease, which was the cause of death.

Belfast, April 22nd.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Nutrition in Hysteria.

AT the last meeting of the Academy of Sciences Professor Charcot communicated a note in the names of Drs. Gilles de la Tourette and Cathelineau on Nutrition in Hysteria. The authors give the result of the researches carried on by them during the last two years in the wards of Professor Charcot at the Salpêtrière, which confirm the results obtained by Drs. Mairet and Lépine. The quantity of urea diminishes considerably in hysteria, and the relation of earthy phosphates to the alkaline phosphates is as one to three. It is interesting to know that the reverse is the case in epilepsy. The quantity of urea rises in epilepsy, and the relation of the earthy phosphates to the alkaline phosphates is not more than one to two, or even one to one.

Demonstration of Hypnotism.

On Friday, the 11th inst., Professor Bernheim, of Nancy, gave some curious demonstrations of hypnotism at the Hôtel Dieu, when Drs. Charcot, Dumontpallier, and Brouardel, and many leading members of the legal and literary professions were present. Dr. Bernheim here developed the doctrine of the School of Nancy, which teaches that suggestion is the basis of all the phenomena of hypnotism. According to the author, there is suggestion in everything, and it plays a part in all actions good or bad. This theory is very important from a medico-legal point of view, as it tends to support the statement that the greatest criminals are not always the most culpable, as they may be irresponsible victims of suggestion or of auto-suggestion. Dr. Bernheim was able successively to suggest hallucinations of motility or of sensibility, then hallu-

cinations of acts—in creating in the awakened subject imaginary recollections of stealing, which he terms "retro-active hallucinations"; and thus proved the readiness with which false witnesses, really believing in their own good faith, might be created. Their conviction is firmly founded, and they even amplify the statement which was suggested to them by adding to it details of their own invention. In a note communicated to the Academy of Sciences *à propos* of this subject, Professor Charcot made the remark that a great deal was being said and written about hypnotic suggestions, and he feared that it would end by suggesting to everybody that everything was suggestion, and that we only exist by suggestion. He considered this as going at too rapid a pace, and concluding too quickly. The question was not so simple. He thought it was necessary to be able to well define the subjects on whom one is to operate, and to guard against simulation. One ought first to know whether a subject was really asleep when he assumes to be so. M. Charcot has discovered a new means by which to decide the question; that is, by analysis of the urine of twenty-four hours. If the hysterical subject has really slept, this may be demonstrated by prolonging the experiment and examining the proportion of urea. The chemical analysis will reveal whether simulation is being practised or not, and forms a means of verification not within the reach of the subject. Dr. Charcot concludes his note by advising great prudence in our conclusions on experiments in hypnotism and on young hysterical subjects.

In connexion with the atrocious murder of a bailiff lately in Paris, for which a young woman is now in prison awaiting her trial on the charge of being an accomplice, although the supposed principal actor in the crime has not yet been discovered, it has been suggested that this woman was under the influence of hypnosis when the murder was being committed, and that she acted with the unconsciousness of a somnambulist. Such, however, is not the opinion of M. Charcot, who considers her a person not at all likely to form a hypnotic subject. That suggestion would urge one to commit a crime Dr. Charcot thinks is pure fable. Nothing of the kind has ever been seen at the Salpêtrière, where every form of hypnotism may be witnessed.

Dr. Desprès, the well-known surgeon and municipal councillor, has protested in rather vehement terms against experiments in hypnotism being practised on patients in hospitals in the presence of a non-medical public, as was lately done at the Hôtel Dieu, and is often witnessed at the Salpêtrière. A debate ensued at the Municipal Council, when the Director of the Assistance Publique was questioned on the subject, and after a somewhat evasive answer by this functionary the debate was closed.

Women and Night Work.

With reference to a question put to the Academy of Medicine by the President of the Commission of the Chamber of Deputies, relative to night work by women in the public factories, Dr. Rochard, reporter for the Academy, replied that any law which would authorise women to work at night in the manufactories would produce most disastrous consequences on their health. At the last meeting of the Council of Public Hygiene the law regulating the work of young girls was confirmed, by which it is forbidden to employ girls under sixteen years of age at sewing machines worked by means of pedals.

Paris, April 22nd.

VIENNA.

(FROM A CORRESPONDENT.)

Influenza and Inflammation of the Middle Ear.

AMONG the most recent additions to the literature of the influenza epidemic must be included a paper by Professor Gruber, containing an account of his observations on the relation of influenza to disease of the middle ear during the epidemic which terminated in Vienna some six weeks ago. Professor Gruber has one of the largest clinics in the General Hospital under his control, and patients come to him not only from Vienna and its immediate surroundings, but also from distant parts of the Austrian Empire. The paper which I refer to, and which is here summarised, was read before the Medical Society in Vienna—a Society which for some weeks past has devoted a considerable portion of each sitting to the discussion of the epidemic. It will be recollected that public attention was first directed to the outbreak of the influenza in Vienna by a lecture on this subject given by Professor Nothnagel to his class, towards the close of the first week in last December. One or two weeks later, Professor Gruber was convinced, from observations on the patients attending his clinic, that this year, at all events, the epidemic was of a much severer and more serious character than previously. This opinion the professor based on the increase in the number of cases of inflammation of the middle ear, but especially on the nature of the inflammation. During an epidemic, one of whose most constant characteristics was a catarrhal affection of the mucous membrane of the respiratory tract, it was only to be expected that, if the organ of hearing were involved, the result would be a catarrh of the middle ear—a supposition which, as can be seen from the following statistics, events proved to be partly correct. Much more important, however, in its nature and serious in its import, was a marked increase in the number of cases of purulent middle ear inflammation. A tabular compilation of the number of patients suffering from these affections who, during the months of November, December, and January of the last two years, and the first month of the present, attended Professor Gruber's clinic was laid before the Society. From this table I find that out of 323 patients in December (1888), 32 had catarrhal and 36 purulent inflammation, whereas during the same month last year, from a clinic of some 333 patients, 115 had catarrh and 103 purulent inflammation of the middle ear. Still more striking are the statistics belonging to January. In this month of 1889, of 367 patients, 59 had catarrh, and exactly the same number suffered from purulent inflammation of the middle ear, while in the corresponding month of this year, when the epidemic was at its height, with a clinic of 43 patients less, there were 138 cases of the former and 186 of the latter affection. Further during the latter month the number of cases of double purulent inflammation (14) were more than twice the number which had occurred during January, 1889. Fever invariably attended the purulent inflammation, and among the next important of the subjective symptoms of this affection was the severe pain, which, not confining itself to the ear and corresponding half of the head, spread into the neck, and sometimes even into the arm of the same side. Another remarkable objective symptom was an intense hyperæmia, which manifested itself at an early stage of the process, and persisted after a rupture of the tympanum had taken place or a paracentesis had been made. This hyperæmia was present in the mucous membrane of the middle ear, in the tympanum (often indicated by hæmorrhages in its substance or by vesicles on its surface filled with blood) in the external ear and surrounding structures, and by it must be explained the fact that for some days after a rupture or a paracentesis the discharge had the appearance of almost pure blood. To this intense hyperæmia and accompanying swelling is to be assigned the severe pain referred to above as one of the symptoms on which the patient laid the greatest stress. Further, it often happened that shortly after the beginning of the affection inflammation of the mastoid portion of the temporal bone set in. The ostitis and periostitis passed on to the formation of abscesses, which extended into the soft tissues around the mastoid process, and in some cases into the neck. In six patients who never previously suffered from affections of the ear, and who were then passing through, or had recently passed through, the influenza, notwithstanding the most careful local and general treatment, Professor Gruber was obliged to open the mastoid process and liberate the pus accumulated in the cells. The final result of these cases, as well as of all the other cases in which operative proceedings were not necessary, was highly satisfactory, and Professor Gruber can well congratulate himself on the success attending some of the most severe cases of otitis media suppuration he has ever observed—cases which he must class with those occurring after severe infectious diseases, such as scarlatina or pneumonia.

Vienna, April 21st

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

School of Medicine.

THE only medical college in Egypt, though founded by eminent Frenchmen, and boasting later on many honoured German names, has for some years past been exclusively in the hands of Egyptian professors. These gentlemen, after gaining their diplomas at Paris or at Montpellier, have not taken pains to revisit Europe, or to keep themselves up to the mark of modern scientific knowledge. Moreover, their method of teaching medical students has been by giving lectures only, and not by inducing the pupils to do practical work themselves. Seven years ago, the senior students presented themselves for their examination and certificate to practise medicine, with their heads fully stuffed with pages of book-learning, but almost as unable as parrots to apply their knowledge. It was even difficult for them to answer questions unless they were permitted to do so in the words which they had learned by rote. Mr. Sandwith at that time succeeded in persuading the Government to allow students to serve for one year in the hospital wards before being allowed to qualify for their diplomas. This system has worked well, and now a further concession has been wrung from the Government, so that in future the boys of the last two years will employ the greater part of their time in practical work in the wards and in attending clinical lectures. After some unworthy struggling on the part of the Minister of Public Instruction, and others of the less intelligent members of the Egyptian Government, Dr. Keatinge has now been transferred from the War Department to act as Professor of Anatomy. This is the first time, so far as I know, that an Englishman has been appointed to any post in the medical school. He must for the present give his demonstrations exclusively in Arabic, but he has already done some useful work by ensuring that dissection shall be seriously carried on, and that some system of "signing up" be introduced. Also a pickle tank must be established for keeping bodies during the four summer months for anatomical work during the winter. At present dissectors are dependent upon the corpses of those who die in the hospital, and this presupposes what up till now has been the rule—that no necropsies will be desired by the hospital staff. Luckily in Egypt there is no longer any fanatical dislike to dissecting, though it is said that sixty years ago Dr. Clot Bey, the French founder of the school, was obliged to wear a coat of mail in the dissecting-room, and was actually once stabbed by an infuriated Mussulman. It has always seemed quite absurd that native doctors should be taught only in Arabic, because there are almost no modern works of science written in that language, and no possibility of the medical man in the future keeping himself abreast of sciences which grow so rapidly as medicine and surgery. It has consequently often been recommended that English and French should be taught to medical students, and these subjects have been admitted into the curriculum, and taught in a half-hearted way by an incompetent Copt or Syrian. Now, it is promised us that all this is to be changed, and an Englishman to teach real English is to be appointed this summer.

Khedivieh School for Boys.

It is not only in the medical school that English influence is beginning to be felt, for an English inspector of Government schools has just been appointed, and the establishment which practically feeds the medical school has now been divided into two sides, French and English. Presided over by a Mussulman but French-speaking head master, this is a boys' school numbering 420, of whom 150 have made choice of the English side, while 270 have selected French as their foreign language. The boys are drafted from various primary schools scattered about Egypt, and enter here at any age between ten and thirteen, remain here about four years, and are then passed on according to their own choice to the higher schools, which train them to become doctors, engineers, and lawyers. There are now five French masters and six English ones, and the subjects taught in English are the English language, geography, history, arithmetic, and elementary science. At present no more than fifteen hours a week can be spared for English; but it is hoped that this will be greatly extended, and then physics and chemistry will also be taught by Englishmen. Already the boys can answer questions quite intelligibly in our language, and there is every reason for being encouraged by what has only this winter been done. There is another somewhat similar school in Cairo, where boys of rather better social standing go, and this is at present wholly under French influence. It is a sad sight while inspecting schools in Egypt to see the boys holding their books close to their faces. This is not due to primary errors of refraction, but to the partial blocking of the pupil from old keratitis following the granular ophthalmia of infancy. With the exception of this and the late influenza epidemic, the health of the scholars seems remarkably good.

Kasr-el-Aini Hospital.

Two additions have lately been made to the teaching staff. Mr. Sandwith, who for four years has been seeing all women and children out-patients, with occasional spells of in-patient work, has now been officially placed in charge of fifty-six beds in the medical wards, a similar number being retained by a native pasha. Dr. Scott lately settled in Cairo, but partly acquainted with Arabic, has at the same time been appointed joint ophthalmic surgeon to the hospital, dividing some thirty-four beds and the out-patient department with a native professor. These two new appointments are each worth £150 a year, and the English holders are expected to teach medicine, pathology, and ophthalmic surgery in the same way that Mr. Milton has for some time past been successfully teaching general surgery.

The Stanley Expedition.

A week ago Mr. Stanley and Surgeon Parke left Cairo to fulfil engagements in Rome, Naples, Cannes, and Brussels, at which city they will be the guests of the King of the Belgians. Thence they will go to Paris and London, reaching the latter about April 28th, and attending the Royal Geographical Society's meeting on May 5th. The Soudanese soldiers who safely returned here from Central Africa have received enough back pay to astonish them, and have been returned to the Egyptian Army. There remain only the odd mass of people who were called Emin Pasha's, and who were awaiting his arrival here to be rewarded or punished as he should decide The Egyptian Government will find it difficult now to know what to do with them. Mr. Stanley has left here perfectly well, though still susceptible to anything like cold weather. He worked very hard at his new book while here, and is correcting the proofs so that it may be ready for issue in May. England will not fail to do honour to Mr. Stanley, who has already received telegrams of congratulation from nearly all the crowned heads of Europe. And what will be done for our colleague, Surgeon T. H. Parke? He has not been idle during the nine years that he has served Her Majesty. He was in Egypt during the Tel-el-Kebir campaign of 1882, and the next year served through the cholera epidemic here, and was in charge of the cholera camp at Helonar, where 250 out of 550 English soldiers were down with the disease, and there was a great mortality among the Medical Staff Corps in consequence of their perpetual attendance on the sick. His report on this camp was published in the Blue Books, and he was specially thanked for his services by Surgeon-General Irvine. During the Nile campaign of 1884–85 he was well to the front, and by his hard work earned the friendship of all with whom he came in contact. He marched with Sir Herbert Stewart's column across the desert, and was present at the actions of Abu Klea, Gubat, and Metemmeh. He was at first in medical charge of the Naval Brigade under Lord Charles Beresford, when every officer except himself was killed or wounded, and then returned to Korti upon the retreat in charge of the Guards Camel Corps, with whom he remained at Dongola till the close of the campaign. For this he received the medal with clasps for the Nile and Abu Klea and also the Khedive's bronze star. I may perhaps mention here that no surgeon serving with the British troops has yet received any decoration from the Khedive, and this is the more curious because, as their work brings them after an engagement into special contact with Egyptian troops, they would seem to deserve it quite as much as other English officers. In February, 1887, Surgeon Parke accepted Stanley's invitation to join the expedition for the relief of Emin Pasha, signed a contract of agreement to go as a volunteer without remuneration of any kind, and obtained leave without pay from the military authorities. He left Egypt with Stanley on Feb. 4th for Zanzibar, where 700 porters had to be engaged and vaccinated. This vaccination seems to have saved their lives in a wonderful way at a time when the non-vaccinated natives were dying of small-pox at a

rate which threatened to seriously hamper the expedition. From Zanzibar he went straight to the mouth of the Congo, and then with a flotilla of Congo steamers to Yambuyo, 1000 miles from the coast. He then accompanied Stanley and the advance column in all their weary wanderings, and through the hardships of which we do not yet know a tenth part. When Stanley got safely to the coast he wrote in his official report: "If the expedition has been happy in anything, it is in the selection of its unrivalled physician and surgeon, Mr. Parke." Moreover, Stanley and some of the other officers of the expedition have freely admitted to the writer that they owe their lives to him, and in private they can never praise him too highly. Stanley, from his own account, seems to have been ill for six weeks in the forest, which had an area of 250,000 square miles. He suffered from subacute gastritis at a time when nearly half the men died of starvation. There were practically no food and no sunshine, and a long convalescence, during which life had to be sustained with forest fruits, green tops of bushes, roots, bananas, and fungoid growths clinging to decaying trees. For a long time he had to be fed with an indiarubber tube, and was too weak to turn himself in bed. Then, again, a year later he was laid low by a similar attack followed by a much longer convalescence, during all which time he required careful nursing. It is easy to guess what would have become of the Relief Expedition if Stanley's valuable life had not been saved. One of the most memorable incidents of Mr. Parke's services during the three years' wanderings was when Mr. Stairs was wounded by a poisoned arrow near the apex of his heart. The latter believes that he owes his life to Mr. Parke, who sucked all the poison from the wound at the risk of his own life. Many men wounded by similar arrows upon the same day died of the effects of the poison within a couple of days. Some samples of these wooden arrows with the poison and its antidote have been sent home for future analysis. When the explorers at last reached the coast, and were just preparing for their well-earned repose, poor Emin Pasha, as all the world knows, fell out of a window thirty feet high and fractured the base of his skull. Directly he recovered consciousness he asked for Mr. Parke and begged him to stay with him, the German medical men disagreeing with their English colleague's less gloomy prognosis. While engaged in day and night watching at Bagamoyo, Mr. Parke was laid prostrate by bilious remittent fever, with copious hæmaturia. He was carried on board a steamer, collapsed and believed to be dying. He arrived at Cairo on Jan. 16th, convalescing from fever, hardly able to walk upstairs, thin, weak, anæmic, with great staring eyes; but a few days later he began his ordinary medical duty at the Citadel Hospital, and his many friends will be glad to learn that since then his weight has gone up to 173 lb. from 132 lb., which was his lowest record in Africa; and this is only a sign of the general improvement in his health. The Khedive has already recognised his services by giving him the third class of the Medjidieh, and the Royal College of Surgeons of Ireland has shown a prompt appreciation of his work worthy of being imitated, by making him an Honorary Fellow, a distinction, I fancy, only possessed by six other living people. In the ordinary course of events he must become a Surgeon-Major in about two years' time—and it may be remembered that as service on the West Coast of Africa always counts as double time, it would not be unfair to accord the same privilege to services rendered during an expedition which has undergone more dangers and hardships in Central Africa than would have been possible on the West Coast. If the English Government wishes to be generous, they can easily promote Mr. Parke to the rank of Surgeon-Major, with increased pay, and at the same time give him a well-earned decoration.

Cairo, April 14th.

Obituary.

CHARLES EDMOND LISTER, M.R.C.S., L.K.Q.C.P.I.

THIS promising member of the profession, whose premature death it is our sad duty to record, was the younger son of the late John Lister, Esq., M.D., J.P., of Shibden Hall, Halifax. He entered Caius College, Cambridge, and took his B.A. degree in 1870 (Natural Science Tripos). He afterwards, with a view to following his father's profession, became a student at St. George's Hospital, and subsequently at the Liverpool Royal Infirmary, of which institution he was appointed house surgeon. He also attended lectures at St. Bartholomew's Hospital, and qualified as L.K.Q.C.P.I., L.M., L.R.C.S.I., and M.R.C.S. Eng. In the pursuit of his favourite studies, ornithology and entomology (to which he had been devoted from boyhood), Mr. Lister visited the West Indies and made three voyages to the Upper Amazon, bringing home with him on each occasion numerous valuable specimens of the fauna of those countries. He presented the University Museum, Cambridge, with a unique collection of West Indian birds, and spent considerable time and pains in classifying and rearranging the ornithological section of the local museum at Halifax.

Mr. Lister left England last April with the intention of visiting Bolivia, but, in the malarious district above the falls of the Madeira river, he was attacked by fever, which, unfortunately, terminated fatally on Nov. 6th, only two hours before he should have reached his journey's goal—Santa Ana. Mr. Lister was also a great lover of all manly sports, and his upright and sterling character had endeared him to a wide circle of friends.

WILLIAM G. HILL,

RETIRED FLEET SURGEON, R.N.

THIS gentleman, late of The Belfry, Fermoy, died at his residence, 11, Colville-houses, Bayswater, on March 20th, from syncope. He was a native of Greig, county Cork, Ireland, and the youngest son of Arundel Hill, Esq. After obtaining his diploma as L.R.C.S.I., he entered the Royal Navy, and in October, 1853, was appointed to H.M.S. *Impregnable* as Assistant Surgeon to Plymouth Hospital. After active service until January, 1859, he was appointed to Haslar Hospital, and later to the *Excellent*, until April, 1862, and in 1860 obtained the diploma of L.K.Q.C.P.I., the membership of which College he received in 1888. He then was on active service as Surgeon for more than eight years in various vessels, and in 1873 took the diploma of F.R.C.S.I. In August, 1866, whilst serving on H.M.S. *Clio* on the West Coast of Mexico, he was called on to cope unaided with a dangerous outbreak of remittent fever. Whilst suffering severely from this himself, he had at one time 126 cases under his care, and, being unable to walk, he was carried round from patient to patient, until he was relieved and invalided home. In 1871 he was made Staff Surgeon, second class, and in 1875 Fleet Surgeon. In 1867 he suffered from jaundice and nephritic inflammation, and from this time onwards he constantly required sick leave, until he retired from the service in January, 1877.

Mr. Hill was one of those true lovers of his profession who lost no opportunity of studying. A constant reader, he endeavoured to keep himself well posted in those advances which medical science had made during his life, and when quite incapacitated for work his interest in such subjects continued unabated. His kindly manner and active sympathy gave to his patients that confidence in his skill and knowledge which they justly merited. He was buried in the family vault in Doneraile, county Cork.

ROYAL COLLEGE OF PHYSICIANS.

A COMITIA of the College was held on the 24th inst., Sir Andrew Clark, Bart., President, in the chair. At this meeting the following gentlemen were elected Fellows of the College:—John Tatham, M.D. St. And.; Fletcher Beach, M.B. Lond.; John Dixon Mann, M.D. St. And.; Edwin Clifford Beale, M.B. Camb.; Thomas William Thursfield, M.D. Aberd.; Thomas Oliver, M.D. Glasg.; Henry Ashby, M.D. Lond.; Alexander Haig, M.D. Oxon.; Robert Percy Smith, M.D. Lond.

The following were admitted to the Membership:—Thomas Robert Bradshaw, M.D. Dub.; Charles William Chapman, L.R.C.P.; James Crawford, M.D. Dur.; Archibald Donald, M.D. Edin.; Vaughan Berkeley Harley, M.B. Edin.; Leonard Remfry, M.B. Camb.; John Sinclair, L.R.C.P.; George Alexander Sutherland, M.B. Edin.; George Owen White-Cooper, M.B. Camb.; Richard Thomas Williamson, M.D. Lond.

Licences were granted to the 112 successful candidates.

Dr. Batho of Jersey resigned his membership of the College owing to the circumstance of his practice compelling him to dispense medicines for his patients. The

resignation was accepted, and the Council unanimously voted that a licence be granted to him.

The resignation of his licentiateship, tendered by Mr. J. D. Llewellyn, was accepted.

A cordial vote of thanks to the President for his gift of an examiners' library was carried by acclamation on the motion of the Senior Censor.

Dr. Thorne Thorne was appointed Milroy Lecturer for 1891.

The report of the examiners for the Murchison Scholarship was received, and Mr. Bedford Pierce was awarded the scholarship, which he received at the hands of the President.

The quarterly report of the Finance Committee was received and adopted.

A report was presented by the Pharmacopœia Committee recommending the addition of many new remedies to the Pharmacopœia. After some discussion, the report was referred back to the committee for reconsideration.

A report from the Committee on the Extension of the Examination Hall Buildings was received and adopted.

Medical News.

UNIVERSITY OF ST. ANDREWS.—The following gentlemen, having passed the required examinations, had the degree of Doctor of Medicine conferred upon them on April 17th:—

David Fennell, L.R.C.S.I., L.K.Q.C.P.I., F.R.C.S. Edin., London; James Hall, L.R.C.P., L.R.C.S. Edin., Peel; Wm. Alex. Hepburn, L.S.A. Lond., F.F.P.S. Glas., Coxhoe; R. A. Douglas Lithgow, L.S.A. Lond., M.R.C.P. Edin., L.R.C.S., London; John Martin, L.F.P.S. Glas., L.S.A. Lond., L.R.C.P. Edin., F.R.C.S., Huddersfield; James Simpson, L.R.C.P. Edin., F.R.C.S., Leith; Charles James Sutherland, L.R.C.P. Edin., L.F.P.S. Glas., South Shields; John Brooke Unwin, L.R.C.P. Edin., L.R.C.S., Rugby; Charles Westbrook, L.S.A. Lond., L.K.Q.C.P.I., Retford; Henry Wilson, M.R.C.S., L.S.A. Lond., Wavertree, Liverpool.

CONJOINT SCHEME OF THE COLLEGES OF PHYSICIANS AND SURGEONS IN IRELAND.—The following candidates have passed the Second Professional Examination:—

M. J. Chevers, V. Doyle, H. Flynn, W. J. Greer, F. J. Greeves, Giulio Hamilton, W. Hornibrook, Lowther Jameson, C. A. Molony, C. J. Nally, T. O'Connor, P. O'Gorman, and G. H. Russell.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen, having passed the necessary examination, have been admitted Fellows of the College:—

R. G. Patteson. | W. C. T. Poole.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates have passed the First Examination in Chemistry, Materia Medica, Botany, and Pharmacy:—

W. Fowler, Durham University; J. T. Woodhouse, Liverpool.

The following have passed the Second Examination in Anatomy and Physiology:—

F. Christie, St. Thomas's Hospital; C. L. Hayes, Sheffield; P. Mackin, New Zealand and Glasgow Universities; F. V. H. Mossman, Galway, Sheffield, and Manchester; W. W. Pratt, Charing-cross Hospital; F. K. Rider, Yorkshire College, Leeds; R. E. Roberts, Liverpool University College; G. Schilling, St. Thomas's Hospital; H. N. A. Taylor, Cambridge University; R. B. Williams, St. Thomas's Hospital; S. B. Williams, St. Mary's Hospital; P. Forbes Winslow, Charing-cross Hospital.

Physiology only.—F. G. Hargraves and F. B. Lewis, London Hospital; J. E. L. Pollard, Belfast and Charing-cross Hospital; P. Power, Cork and Edinburgh R.C.S.; W. Fowler, Durham University.

The following have passed the Examination in Surgery:—

J. Cohen, Charing-cross Hospital; S. H. R. Van R. de Groot, King's College Hospital; A. Morton, Glasgow University; E. F. Page, Queen's College, Birmingham; T. L. Pennell, University College; H. Sanders, Charing-cross Hospital; J. Spurr and W. L. Symes, St. Mary's Hospital; N. A. A. Trenow, St. George's Hospital; J. G. Wilson, London Hospital.

The following have passed the Examination in Medicine, Forensic Medicine, and Midwifery:—

S. E. Atkins, St. Bartholomew's Hospital; P. A. Colmer, London Hospital; F. S. Colton, University College; A. Hawley, Queen's College, Birmingham; W. Hook, Westminster Hospital; A. Morton, Glasgow University; E. F. Page, Queen's College, Birmingham; T. L. Pennell, University College.

Forensic Medicine.—H. Fairfax, Charing-cross Hospital.

Midwifery.—H. C. Coopland, St. Bartholomew's Hospital; A. H. Cresswell, London Hospital; J. R. Fuller, St. Mary's Hospital.

Messrs. Colmer, Hawley, Morton, Page, Pennell, and Symes received the diploma of the Society, qualifying for registration.

ENGLISH CONJOINT EXAMINING BOARD.—In the list published last week of gentlemen who had passed the Second Examination of the Conjoint Board, the name "R. J. Wait" should have been printed J. R. Whait.

MEDICAL MAGISTRATE.—Mr. A. Playne, M.B. Lond., M.R.C.S., has been placed on the Commission of the Peace for the borough of Maidenhead.

VOLUNTEER AMBULANCE SCHOOL OF INSTRUCTION.—The medical officers' proficiency class will commence on Monday, May 12th, at 4.30 P.M. Applications to join the same to be made to R. R. Sleman, Hon. Sec., 7, St. Benet's-place, E.C.

HOME NURSING. — Mr. Henry Tate, sugar refiner, of London and Liverpool, whose benefactions have been most munificent, has announced his intention of giving £5000 to London, and a similar sum to Liverpool, towards the promotion in those cities of home nursing of the sick poor.

THE SANITARY INSTITUTE.—At an examination held for inspectors of nuisances on April 17th and 18th, 120 candidates presented themselves, of whom fifty were certified to be competent, as regards their sanitary knowledge, to discharge the duties of inspector of nuisances.

THE GERMAN HOSPITAL, DALSTON.—The forty-fifth anniversary festival of the German Hospital, Dalston, took place on the 23rd inst. at the Hôtel Métropole. The Duke of Cambridge, president of the hospital, occupied the chair. The secretary announced donations and subscriptions amounting to £3540, a sum which included £200 from the Emperor of Germany, £50 from the Emperor of Austria, and £20 from the chairman.

PRESENTATION.—Mr. C. T. Griffiths, L.R.C.P. Lond., M.R.C.S., on resigning his appointment as residential medical officer to the Royal Mineral Water Hospital, Bath, has been presented by the officers of the institution, as a token of regard, with a handsome carriage clock. The nurses, patients, and servants have also presented him with a case of dessert knives and forks and fish knives and forks, with an address testifying their esteem.

RICHARD MIDDLEMORE POST-GRADUATE LECTURES.—Mr. H. Eales, hon. surgeon to the Birmingham and Midland Eye Hospital, has been appointed by the Committee of Selection to deliver these lectures during the ensuing year, the second year of their establishment. The lectures were founded at the end of 1888 by Mr. Richard Middlemore, the senior consulting surgeon to the Birmingham and Midland Eye Hospital, in connexion with that institution, with a view of extending its usefulness as a teaching centre.

WEST HAM HOSPITAL.—The Duke of Westminster, on the 23rd inst., formally declared West Ham Hospital open for public use. Mr. J. Meeson, J.P., the chairman of the governors, presided over an influentially-attended meeting in the men's ward of the institution. The new hospital is at the rear of the West Ham, Stratford, and South Essex Dispensary, with which it is now incorporated, and it has been erected to accommodate beds for twelve men and twelve women; and there are two small wards for six boys and six girls, the funds for the latter being raised by the efforts of the teachers and scholars of the different elementary schools in the district. The total cost of the hospital, the foundation-stone of which was laid by the Duke of Cambridge on June 19th, 1888, was £7000.

FOOTBALL CASUALTIES.—On the 12th inst., a young man named Hargreaves, while playing in an Association football match at Heywood, Lancashire, sustained a fracture to his shoulderblade and other severe injuries.—Recently, Frank Venn, aged sixteen, whilst playing football at Wolverhampton, sustained a fracture of the leg.—A youth named Nicholson has died at Middlesbrough from injuries sustained a few days since in practising football on the Lenthorpe-road ground, Middlesbrough.—Albert Smith, of the St. Helen's Recreation Football Club, received serious injuries on Monday in a match at Lancaster with a team belonging to that town, and is lying in a critical condition at the Lancaster Infirmary.—On Saturday, while playing a football match between the Garnet-hill Club and Phœnix Swifts, on ground off New Keppochhill-road, James Mellon, aged twenty-four, sustained a fracture of the left leg above the ankle.

THE PECULIAR PEOPLE.—Dr. McDonald, M.P., Coroner for North-East London, held an inquiry on the body of Amelia Challis, a member of the sect known as the "peculiar people," who had been ill for six months and refused medical aid, on the ground that "she did not want for anything but the Lord." The coroner said no action could be taken against the husband, as the woman herself had refused.

BURIAL REFORM.—The Lower House of Convocation of York considered last week a resolution on this subject, moved by the Archdeacon of Manchester, to the effect that the House should give its approval to a memorial, influentially signed and about to be forwarded to the Government, urging them to amend the Burial Acts in such a manner as to prevent the overcrowding of burial grounds, and to make such an occurrence a penal offence, on the ground of protecting the public, arising from the use of cemeteries already full. The resolution was carried unanimously.

HOSPITAL FOR SICK CHILDREN.—A festival dinner in aid of the funds of this institution was held on Tuesday night at the Hôtel Métropole. The Lord Mayor presided, and, in making the usual appeal to those present to subscribe liberally, said that, besides the amounts necessary for the maintenance of the hospital, £9000 were still required to complete and furnish the new wing. He specially asked for a large number of new annual subscribers, who constituted the most important source of revenue. He mentioned the fact that since 1880 no less than 130,000 patients had been treated, besides a very large number also at the Convalescent Home at Highgate. Subscriptions and donations to the amount of £2500 were announced by the secretary, Mr. Adrian Hope.

BEQUESTS AND DONATIONS TO HOSPITALS.—The late Mr. W. C. Salter, of Hobart-place, Eaton-square, London, bequeathed £20,000 each to St. George's Hospital and St. Thomas's Hospital; £3000 to the London Hospital; £2000 each to the Seamen's Hospital Society (Greenwich), St. Mary's Hospital, Westminster Hospital, the Cancer Hospital, Hospital for Consumption and Diseases of the Chest, and the Royal Hospital for Incurables; £1000 each to the Victoria Hospital for Children, the National Hospital for Diseases of the Heart and Paralysis, the Lock Hospital and Asylum, and St. Peter's Hospital; and £500 to the Chelsea Hospital for Women.—The late Bishop Lightfoot, Bishop of Durham, bequeathed £100 each (free of legacy duty) to the Durham County Hospital, the Newcastle Infirmary, and the Sunderland Infirmary.—Miss Clara Waddington, late of York-place, Marylebone, left by her will £2000 to the Durham County Hospital.

ANTHROPOMETRY AND THE IDENTIFICATION OF CRIMINALS.—Mr. Francis Galton presided over a meeting of the Anthropological Society on Wednesday evening, when an exposition was given of the method adopted in France of identifying criminals by anthropometric measurements. The method has been described as extremely ingenious, and has been devised by two brothers, the sons of M. Bertillon, an eminent French statistician who died lately. After having once been subjected to an examination by this method, a person might be recognised even after death, provided access could be had to his skeleton. The basis of the system is that there are certain parts of the body the measurements of which do not undergo much change as life advances, whereas the mere appearance of an individual may change very much. Hence the photograph of the person examined may be said to hold only a secondary place in any system of identification. M. Broca has pointed out that the diversity of opinion on this subject is largely due to the operators not recognising sufficiently the extreme necessity for accuracy and exactitude in all the details of the system, and when errors have been made they have been found to be due to the want of exact methods. The whole system affords a ready and trustworthy means of recording and referring to facts which cannot fail to be of very great use in identifying criminals. M. Bertillon, who spoke in French, succeeded in captivating the interest of a large audience for over two hours. Sir Rawson Rawson narrated the experience he had gained of its use in France, and stated that in this country the subject was engaging the attention of the authorities, and no doubt before long would be generally used.

BOLTON INFIRMARY AND DISPENSARY. — The general results of the work accomplished by the institution for the year 1889 are satisfactory. The number of new cases admitted was 6123, against 5957 in the previous year; 15,972 attendances were given to out-patients, 6946 to casualties, and 4041 visits to patients at their homes. The income for the year amounted to £4416 0s. 11*d.*, and the expenditure to £5709 19s. 4*d.* The isolation wards had been completed and furnished. Additional sleeping accommodation for nurses had also been provided.

MEDICAL NOTES IN PARLIAMENT.

Vaccination Act (Persons Imprisoned).

IN the House of Commons, on Monday, the 21st inst., Mr. Bradlaugh asked the Secretary of State for the Home Department whether, in the case of the return of the Vaccination Acts (Persons Imprisoned, &c.), he could now state the extent of the omissions from that return; and if he would state what steps the Government proposed to take to enforce the order of the House of August 8th, 1889.—Mr. Matthews: The only omission of which I am aware is that of certain portions of the county of Middlesex and of the borough of Banbury. By a printer's error Merionethshire has been printed Monmouthshire. A new edition of the return is about to be issued, and these errors will be corrected. The hon. member will find the return for Hampshire and Brecknockshire under Southampton and Breconshire respectively.

On Thursday Mr. Bradlaugh asked the President of the Local Government Board, whether an inspector had been recently sent into the Eastern Counties to investigate certains allegations of injuries arising from certain vaccinations performed by Dr. Masson, public vaccinator, or his substitute, whether the inspector's report had been received, and if he would cause such report to be at once furnished to the Royal Commission on Vaccination, and, whether in the event of future cases of evils alleged to result from vaccination being brought to the notice of the Local Government Board, he would cause notice to be at once given to the Royal Commission? Mr. Ritchie: The Local Government Board have instructed one of their inspectors to investigate the allegations of injuries arising from vaccination which are referred to. The report of the inspector has not yet been received. The facts, when ascertained, will be communicated to the Royal Commission on Vaccination. As regards the third question the Board will be happy to meet, as far as they can, any wish which the Royal Commission may express in the matter.

Contagious Diseases (Animals) Act.

A resolution was passed in a Committee of the whole House on which to found a Bill for carrying out Mr. Chaplin's new proposals dealing with the cost of the compulsory slaughter of animals under this Act.

METROPOLITAN ASYLUMS BOARD.

Return of Patients remaining in the several Fever Hospitals of the Board at midnight on April 22nd, 1890.

Hospital	Beds occupied.						Total accommodation.
	Scarlet fever.	Diphtheria.	Typhus fever.	Enteric fever	Other diseases.	Total.	
Eastern Hospital	187	18	..	20	1	226	442
North-Western Hospital	101	20	..	8	..	129	415
Western ,,	142	17	..	10	1	170	262
South-Western ,,	135	..	..	..	..	135	350
South-Eastern ,,	160	17	1	28	6	212	462
Northern ,,	335	28	..	10	..	373	584
Totals	1060	100	1	76	8	1245	2515

SMALL-POX.—*Atlas* hospital ship, 6.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

AMBROSE, ALEX., M.D. Dub., has been appointed Medical Officer for the Buckhurst Hill District of the Epping Union.

BULMAN, FRANK, B.A., M.B., & B.S. Dur., has been appointed House Surgeon and Secretary to the West Norfolk and Lynn Hospital King's Lynn.

CLARK, MICHAEL, M.B., C.M. Edin., has been appointed Medical Officer for the West District and Workhouse of the Belford Union.

DALTON, E. E., L.R.C.P. Lond., has been appointed Medical Officer for the Western District of the Cerne Union.

FLUX, G. B., M.D. Brussels, L.R.C.P. Lond., has been appointed Medical Officer for the First District of the Highworth and Swindon Union.

GRANGER, R. F., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer for the Whitby West District and Workhouse, Whitby Union.

KELYNACK, T. N., M.B. Vict. & Ch. B., has been appointed Assistant Medical Officer for the Crumpsall Workhouse and Receiving Wards, Township of Manchester.

KNOBEL, J. B., M.B. Glas., L.R.C.S. Edin., has been reappointed Medical Officer to the "Volks" (National) Hospital, Pretoria, Transvaal, South Africa.

LLOYD, EDWARD J., M.D., M.A., M.R.C.S., has been appointed Honorary Surgeon to the Carnarvonshire and Anglesey Infirmary.

MCARDLE, FRANCIS JAS., L.K.Q.C.P. Irel., has been appointed Medical Officer for the St. Nicholas District of the Durham Union, vice Wm. Boyd, M.R.C.S., L.S.A., retired.

MACKENZIE, J., M.B., C.M. Aber., has been appointed Medical Officer in connexion with the Linlithgow Oilworks, and also Medical Officer to the Foresters' Society, Linlithgow.

MACPHERSON, J. W C., M.B. Irel., has been appointed Fourth Assistant Medical Officer and Pathologist to the Wadsley Asylum.

MARTIN, A. A., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer for the North Shields District of the Tynemouth Union.

MEADE, WILLIAM G., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer for the Ballymartle District of the Kinsale Union; also Medical Officer of Health and Medical Attendant to the Royal Irish Constabulary.

SMITH, H. L., M.K.Q.C.P. Irel., has been appointed Medical Officer for the Eastern District of the Cerne Union.

SPEECHLY, H. M., M.R.C.S., L.R.C.P., has been appointed Receiving-room Officer at the London Hospital.

STEVENSON, R., L.R.C.P. Edin., L.R.C.S., has been reappointed Medical Officer for Rothwell.

STEWART, EDWARD, M.D., M.R.C.P., has been appointed an Honorary Physician to the St. Marylebone General Dispensary, vice Dr. S. H. Habershon, M.A., M.B., M.R.C.P., resigned.

TODD, FREDERICK, M.R.C.S., L.D.S. Eng., has been appointed Dental Surgeon to King Edward's School, St. George's-road, Lambeth.

VICARS, G. R., M.B., C.M. St. And., has been appointed Medical Officer for the Revesby District of the Horncastle Union.

WATERS, A. J. G., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer of Health for March, Cambs, vice Johns, resigned.

WHITTLE, GLYNN, M.D. Cantab., M.R.C.P. Lond., has been appointed Medical Officer of the Main Bridewell, Liverpool, vice Cavanagh, deceased.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

CANCER HOSPITAL (FREE). Brompton, S.W.—House Surgeon; salary £60 per annum, with board and residence. Also Registrar; salary £50 per annum, with board and residence.

DR. STILWELL, 53, Upper Berkeley-street, Portman-square, W.—Resident Assistant Medical Officer in a first-class Private Asylum, within easy reach of London. Salary to commence at £150 per annum.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House Physiciancy. No salary, but board and lodging provided.

HARROW LOCAL BOARD, Harrow.—Medical Officer of Health for their district. Salary at the rate of £50 a year. No allowance for expenses incurred by him incident to the discharge of the duties of his office.

HYDROPATHIC ESTABLISHMENT, Limpley Stoke, near Bath.—Resident Medical Officer. Salary (with board and laundry) £120, but higher to one with hydropathic, electric, and massage experience. (Apply to S.H., at the Hydro.)

METROPOLITAN HOSPITAL, Kingsland-road.—Physician and an Assistant Physician.

PAROCHIAL BOARDS OF STRATHDON AND GLENBUCKET, Aberdeenshire.—Medical Officer. Salary from the Boards, £65. (Apply to the Chairman.)

PAROCHIAL BOARD OF NEW ABBEY.—Medical Officer. Salary £50. To provide medicine and surgical appliances gratis. (Apply to Mr. Peter M'Donald, Inspector, New Abbey, Dumfries.)

PONTEFRACT GENERAL DISPENSARY.—Resident Medical Officer. Salary £130 per annum, with furnished rooms, fire, light, and attendance.

RANGOON MUNICIPALITY.—Health Officer to the Municipality. Salary Rs. 600 per mensem, rising by annual increments of Rs. 50 per mensem to Rs. 1000. (Apply to Mr. J. Short, Secretary, Rangoon Municipality.)

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant to the House Surgeon. No salary, but board and rooms provided.

SALFORD ROYAL HOSPITAL.—Honorary Medical Officer for the Pendleton Branch Dispensary.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—Three Honorary Assistant Surgeons.

SWANSEA HOSPITAL.—Resident Medical Officer. Salary £100 per annum, with board, furnished apartments, coal, gas, laundress, and attendance.

WESTERN GENERAL DISPENSARY, Marylebone-road, N.W.—Junior House Surgeon. Salary £50 per annum, with board and residence.

WEST HAM HOSPITAL, Stratford, E.—Assistant House Surgeon. Honorarium 30 guineas, with board and lodging.

YORK DISPENSARY.—Resident Medical Officer to visit and attend the sick poor at their own homes. Salary £130 a year, with furnished apartments, coal, and gas.

Births, Marriages, and Deaths.

BIRTHS.

BLAKE.—On April 15th, at Harpenden, Herts, the wife of William H. Blake, M.B., B.S. Lond., of a son.

DENT.—On April 21st, at St. Mary Abbot's-terrace, Kensington, W., the wife of Harry L. R. Dent, M.B. Lond., of a daughter.

FRANKS.—On April 22nd, at Fitzwilliam-square, Dublin, the wife of Kendal Franks, M.D., of a son.

HOUSEMAN.—On April 17th, at Mount Park Estate, Harrow-on-the-Hill, the wife of James Gilpin Houseman, M.D., of a son (stillborn).

KIDD.—On April 16th, at Bromsgrove, Worcestershire, the wife of Cameron Kidd, M.B., F.R.C.S., of a son.

KNOBEL.—On Feb. 22nd, at Pretoria, Transvaal, S. Africa, the wife of J. B. Knobel, M.B., L.R.C.S., of a son.

MILLER.—On April 8th, at Bruce Grove, the wife of F. R. Miller, M.D. (Brux.), L.R.C.P. Lond., of a son.

NICOLSON.—On April 22nd, at the State Asylum, Broadmoor, Berks, the wife of David Nicolson, M.D., Superintendent, of a daughter.

SCOTT.—On April 15th, at Meadow Croft, St. Margaret's, Twickenham, the wife of Charles C. Scott, M.B. Edin., of a daughter.

MARRIAGES.

BURKE—TROUTON.—On April 17th, at the Church of St. Mary the Virgin, Little Birch, Herefordshire, William H. Burke, B.A., M.B., Surgeon H.M. Indian Medical Service, to Edith Louisa, youngest daughter of the late Thomas Trouton, Esq., of Clonskeagh, co. Dublin.

CHANDOS-POLE—SWINHOE.—On April 16th, at St. Mark's Church, New Swindon, by the Vicar, the Hon. and Rev. Maurice Ponsonby, M.A., assisted by the Rev. Canon Jackson, M.A., and the Rev. H. Boustead, M.A., Francis, youngest son of the late E. Sacheverell Chandos-Pole, Esq., of Radburne Hall, Derbyshire, and Lady Anna Chandos-Pole, to Maud Mary (May), eldest daughter of George Money Swinhoe, Esq., of New Swindon, late 95th Regt.

CLARKE.—On April 19th, James Jackson Clarke, M.B., to Lucy Riley.

GRINDON—ROBINSON.—On April 22nd, at the Chapel Royal, Savoy, Francis James Grindon, M.R.C.S., of Olney, son of the late G. H. Grindon, to Katharine Maud Mary, daughter of Frank Robinson, Esq.

MILBURN—GLEADOW.—On April 23rd, at St. Peter's, Cranley-gardens, S.W., Charles Henry Milburn, M.B., M.S., of Hull, to Edith, eldest daughter of Henry Cooper Gleadow, of Cornwall-gardens, South Kensington, S.W.

NEWBOULD—READ.—On April 17th, at St. Paul's, Honiton, Devon, Newton John Newbould, Surgeon, of Abbots Bromley, Rugeley, Stafford, to Bessie, eldest daughter of Chas. Read, Esq., of Honiton.

PEAKE—BUCKNELL.—On April 16th, at St. Peter's, Kensington-park-road, William Pemberton Peake, M.R.C.S., L.R.C.P. Lond., of Wyggeston House, Leicester, second son of C. R. Peake, of Norwood (late of Oxford), to Alice A. Bucknell, of Ladbroke-grove, W., youngest daughter of J. A. Bucknell, of Cheltenham.

QUENNELL—POWELL.—On April 15th, at Christ Church, Streatham-hill, Robert William Quennell, M.R.C.S., L.R.C.P., eldest son of John C. Quennell, M.R.C.S., L.S.A., of Brentwood, Essex, to Bessie G. Powell, youngest daughter of Eyre B. Powell, C.S.I., of Streatham-hill.

RICHARDS—CLARKE.—On April 16th, at the Parish Church, Richmond, Surrey, George Oliver Richards, M.R.C.S., L.D.S., elder son of the late John Richards, of Exeter, to Ada Catherine, fourth daughter of Thomas Meadows Clarke, of Onslow House, The Green, Richmond, Surrey.

ROBERTSON—MACRORY.—On April 22nd, at Christ Church, Lancaster-gate, W., by the Rev. Jas. Henderson, Rector of Wallsend-on-Tyne (stepbrother of the bridegroom), assisted by the Rev. C. J. Ridgeway, Vicar, Surgeon J. R. S. Robertson, Army Medical Staff, second son of Alexander Robertson, Esq., J.P., Berwick-on-Tweed, to Elizabeth Manisty, second daughter of Edmund Macrory, Esq., Q.C., of 2, Ilchester-gardens, W., and Duncairn, co. Antrim, and granddaughter of the late Mr. Justice Manisty.

THOMAS—CURPHEY.—On April 16th, at St. Paul's, Addlestone, Surrey, Benjamin Wilfred Thomas, M.R.C.S., L.R.C.P., of Welwyn, Herts, third son of the late Benjamin Thomas, F.R.C.S., of Llanelly, to Ada Mattie, second daughter of the late Rev. W. T. Curphey, Vicar of Loders, Dorsetshire.

DEATHS.

COVERNTON.—On April 18th, at Knighton, Radnorshire, Charles James Coverton, M.R.C.S., L.R.C.P., aged 57.

DIXON.—On April 23rd, at Chesham Lodge, Lower Norwood, Edward Dixon, Deputy Surg.-Gen. Madras Army, aged 73.

FAWCETT.—On April 22nd, at Scroope-terrace, Cambridge, Rowland Morris Fawcett, M.D., J.P., D.L., aged 87.

KERNAN.—On April 16th, James Kernan, Indian Medical Service, Civil Surgeon of Cannanore, Madras Presidency, aged 35.

WILDASH.—On April 20th, at Luton House, Hythe, Kent, Henry Cobb Wildash, M.D., and J.P. for the county, aged 70.

WILSON.—On April 17th, at Doughty-street, London, James Wilson, M.R.C.S., aged 75.

WOODFULL.—On April 17th, at Sussex Villas, Kensington, Surgeon-Major S. Pratt Woodfull, late Royal Artillery.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, April 28.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2.30 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.
SOCIETY OF ARTS.—8 P.M. Mr. Richard Bannister: Sugar, Tea, Coffee, and Cocoa, their Origin, Preparation, and Uses.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Sir William Stokes: Pylorectomy (illustrated with diagrams).

Tuesday, April 29.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.
GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Hon. G. C. Brodrick: The Place of Oxford University in English History.

Wednesday, April 30.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M. Operations by the Obstetric Physicians on Thursdays at 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical Visits on Wednesday and Saturday at 9.15 A.M.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Conversazione.
SOCIETY OF ARTS.—8 P.M. Mr. T. R. Dallmeyer: Photographic Lenses.

Thursday, May 1.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.
ROYAL INSTITUTION.—1.30 P.M. Annual Meeting. 3 P.M. Prof. C. V. Boys: The Heat of the Moon and Stars. (Tyndall Lecture.)
SOCIETY OF ARTS.—8 P.M. Mr. Lewis F. Day: Design applied to Wood-carving.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Patients and Card Specimens at 8 P.M. Mr. Stanford Morton: Case of Superficial Keratitis.—Mr. Tatham Thompson: (1) Cystic Detachment of the Retina; (2) Rupture of Choroid; (3) Depressed Fracture of Roof of Orbit.—Mr. Lawford: Optic Nerve Atrophy in Smokers.—Mr. Benson (Dublin): Fibroma of Cornea.—Mr. McHardy: On the Artificial Maturation of Immature Senile Cataract by Trituration.—Mr. Simeon Snell: On Artificial Ripening of Immature Cataract.—Mr. Brailey: (1) Gouty Cyclitis; (2) Microphthalmos with Glaucoma.

Friday, May 2.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON MEDICO-CHIRURGICAL SOCIETY (Board-room, West London Hospital).—8 P.M. Pathological Specimens by Mr. H. P. Dunn. Mr. R. W. Lloyd: An entire Membranous Cast from a Uterus. Papers:—Dr. Colcott Fox: The Urticaria of Infancy and Childhood (some illustrative cases will be shown).—Dr. Scanes Spicer: What can be expected from Local Treatment in Hay Fever and Paroxysmal Sneezing.—Dr. Eccles: Paroxysmal Hurry of the Heart associated with Floating Kidney.
ROYAL INSTITUTION.—9 P.M. Mr. Walter H. Pollock: Theophile Gautier.

Saturday, May 3.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.
ROYAL INSTITUTION.—3 P.M. Capt. W. de W. Abney: Colour and its Chemical Action.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 24th, 1890.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Rainfall.	Remarks at 8.30 A.M.
Apr. 18	29·57	N.E.	44	43	..	48	43	·03	Raining
,, 19	29·88	N.E.	43	41	55	48	41	·05	Overcast
,, 20	30·17	N.W.	44	41	78	55	40	..	Overcast
,, 21	30·21	S.W.	54	49	95	60	42	..	Bright
,, 22	29·87	S.W.	52	51	99	63	50	·15	Raining
,, 23	30·00	W.	52	47	105	60	43	·01	Cloudy
,, 24	29·67	S.E.	48	47	62	56	46	·22	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

MEDICAL ARCHÆOLOGY.

MOMMSEN has shown us how valuable an aid to the history of medicine the deciphered epigraph may prove—a source to which we owe a much clearer knowledge of the status and emoluments of physicians in the first century of our era than had till late years seemed possible. Another illustration of this has come to light within the last week or two in Florence, where the demolition of the centre of the city has exposed interesting fragments of memorial tablets which had been used as building material:—

P. STA † CALOTICH
MEDICO
STA † VS ALEXAND
ALVMNO .F (?)
PARENT . . . . . .
. . . . . .

Which, being interpreted, means that the marble was inscribed to the memory of Publius Statius Calotichus on the part of Statius Alexander, or Alexandrinus, his adoptive father and master ("alumnus" in inscriptions expresses the relation of tuition and patronage, as well as that of profession), and (ET?) on the part of his parents (PARENTES). Among the Roman inscriptions in Florence this is the first found in the city which commemorates a medical man. Another physician (Cneius Tullius) is mentioned in an epigraph discovered at Bagno a Ripoli in the environs. The cognomen Calotychus (corresponding to Fortunatus) met with in Greek inscriptions, and that of Alexand . . . . . show the foreign, perhaps Alexandrian, origin of the physicians in question. Florence was a Sullan colony, and the date of the inscription is possibly in the first century of our era, about the time of Celsus.

Manzoni.—Our correspondent seems clearly entitled to the notification fee, as the first person called in. The medical officer of health, presumably, did not know of the previous visit of our correspondent. In any case, we think medical officers of health should not strain their rights in such a case.

Mr. H. S. Tremlin.—We regret to be unable to assist our correspondent.

HOME FOR INEBRIATES.

To the Editors of THE LANCET.

SIRS,—I should feel obliged if any of your readers would tell me of a home for inebriates in Norway. Some time ago, I believe, there was one advertised in THE LANCET.

I am, Sirs, your obedient servant,

April, 1890. MEDICUS.

QUALIFICATION FOR HOSPITAL APPOINTMENTS.

Mr. John Lowe does not understand our "noticing the expression of opinion of a vulgar hospital committee" on this subject. Our duty is to notice the expression of all opinions on professional questions, so long as they are expressed in parliamentary language, which our correspondent scarcely maintains in his letter to us. He declares that, having coached men for both the London and Irish Colleges, he is in a position to state that the Irish College is the more perfect test of a surgeon's competency, referring especially to two points—the necessity in the Irish College for the performance of operations on the cadaver, and to the superiority of its curriculum.

A Correspondent is, we think, quite justified in his inference that whilst public sentiment is morbidly alive to the alleged cruelties involved in physiological experiments, acts far more cruel are frequently condoned as being sanctioned by custom or expediency.

Messrs. W. H. Allen and Co.—The correction was made in our last issue, page 887.

Delta, Looker-on, and *M. O. H.* have not enclosed their cards.

CHESS.

To the Editors of THE LANCET.

SIRS,—I was pleased to see in an unlooked for place—i.e., in the columns of your last issue—a notice of a book on chess, for, as an ardent lover of the Royal game, though no great player, it has always seemed to me that its wider adoption in our hospitals and asylums would prove of great benefit to their inmates. With this view, about twenty years ago I constructed—and, as far as I knew, invented—a hanging chess-board, with 5in. by 5in. squares, and a hook fastened above each on which to hang the men, each of which was furnished with a ring for that purpose. The board I made of papered canvas, and the men of the same material, backed with slips of tin; but better material might be found. This hangs on my bedroom wall, and on it I set out a problem from one of the weekly papers or other interesting position, and I can hardly tell you the pleasure it has afforded me in hopelessly wakeful hours, or the comfort as a means of inducing sleep when the sheep-and-gate experiment has, as usual, failed. Had the poor King been furnished with such a board instead of "a watch case or a common 'larum bell" (whatever that might mean), he would have been the gainer, but we the losers, as his exquisite soliloquy would never have been written. I sent a notice of this contrivance to one of the illustrated papers at the time, and it was favourably mentioned, but I heard no more of it. I am, Sirs, yours faithfully,

Diss, Norfolk, April 19th, 1890. THOMAS EDWD. AMYOT.

*** It may be of interest to our correspondent and to other of our readers to be informed that the first game of chess ever published in any English periodical appeared in THE LANCET of November 9th, 1823.—ED. L.

CRIMINAL LAW AMENDMENT IN CANADA.

AN amendment to the criminal law of Canada has been proposed by the Minister of Justice, which, if it does not defeat its objects by its extreme stringency, ought to render immorality rare, and restrict the propagation of venereal disease within very narrow limits. Amongst other provisions it declares that everyone who has unlawful relations with a girl under thirteen years is guilty of a felony, and liable to imprisonment for life, or for any term not less than five years, and to be flogged; and that any parent or guardian who procures or permits the debauching of any girl or woman in his charge shall, if the female is under thirteen, be guilty of a felony, and liable to fourteen years' imprisonment, and if the girl is above thirteen and under twenty-one shall be guilty of a misdemeanour, punishable with five years' imprisonment. Any indecent assault renders the assaulter liable to two years' imprisonment, accompanied by a flogging.

Mr. D. Thompson.—We have not space to publish a treatise on the requirements for medical practice in Australia. Our correspondent had better make application to the editor of one of the Australian medical journals for the information he desires.

HOLIDAY HOMES.

To the Editors of THE LANCET.

SIRS,—I need not explain to readers of THE LANCET the conditions of the lives of many poor children, nor dwell upon the benefits of country holidays for such children. But I should like to have your support, and that of your readers, for our Holiday Homes. The object is to give a fortnight's holiday in the country to some thousands of children attending our ragged schools and missions. Our needs are gifts of money, new and secondhand wearing apparel, and non-perishable provisions. We are also helped by friends who have built holiday homes, and by others who receive children into their own homes or place them with respectable families; so that in some way all can help us, and for aid of any kind we shall be grateful.

I am, Sirs, yours obediently,

Holiday Homes Fund, Ragged School Union, JOHN KIRK, Secretary.
Exeter Hall, Strand, London, W.C.

RED CROSS LITERATURE.

As becomes a great military power, Germany takes a deep interest in the Red Cross organisation, and may even claim to have put forth the best book on the subject. "Lehrbuch der freiwilligen Kriegskrankenpflege beim Heere des Deutschen Reichs" (Text-book of Voluntary Assistance to Military Patients in the Army of the German Empire) is its title, and its author is the Geh. Regierungsrath von Criegern, President of the Provincial Association of the Red Cross in the Kingdom of Saxony. Von Criegern is a past master in this Medico-military movement, and seven years ago gained the prize for the best essay on "The Red Cross in Germany." The present publication gives a clear account of the organisation as a whole, and then initiates the "volunteer" into all the duties expected of him (or her) with that painstaking minuteness and precision characteristic of the army in whose service it is compiled. It has been "motiviert" by the want of a good manual for self-instruction in Red Cross duty, as well as by the astonishing ignorance which prevails even among the German public of the end and aim of the organisation. So favourable is the opinion formed in official circles of von Criegern's book that the Central Committee of the German Red Cross Association undertakes to send a copy gratuitously to every "volunteer," male or female, enrolled in the service throughout the fatherland. Its publishers are Veit and Co., Leipsic.

Mr. C. Swaby Smith.—We should desire to see some clear details of a feasible scheme likely to be supported by the profession before publishing the proposal of our correspondent, which is doubtless a kind one. There are so many benevolent schemes now unsupported or inadequately so, that we hesitate to broach another.

H. A. B. had better apply to the Hon. Secretary of the Institute, 9, Adelphi-terrace, W.C.

CÆSAREAN SECTION *v.* CRANIOTOMY.

To the Editors of THE LANCET.

SIRS,—In a report of the proceedings of the Obstetric Branch of the Royal Academy of Medicine in Ireland in THE LANCET of April 5th Dr. W. J. Smyly referred to a subject that has exercised the minds of several masters of the Rotunda—viz., Cæsarean Section or Craniotomy.

Three times in my career, so far, I have had to perform craniotomy. While acting as locum tenens in the Lake District I received a message one night that compelled me to ride eight miles across the mountains through deep snow. The journey took three hours. The patient was a labourer's wife, living half-way up a hill overlooking the Derwent Water. She was deformed, with a contracted pelvis. I was unable to deliver with forceps, so perforated and relieved her with the crotchet. The second case occurred in a small workhouse infirmary in the Midlands, where the patients were entrusted to the care of a pauper nurse. The other case was a hydrocephalic child, whose head I had to open after version to allow it to pass *per vias naturales*.

I would like to ask if any of these cases could have been treated otherwise justifiably. I consider it absurd to suppose that Cæsarean section could ever supplant craniotomy in rural practice. No man in his senses would adopt the former operation, except under exceptional circumstances, without at least two assistants, two nurses, and favourable hygienic surroundings. In a well-ordered hospital like the Rotunda, or even in a large city where the necessary accessories could be obtained, it may become more popular, but in country districts I am sure it never will. I remain, Sirs, yours faithfully,

Dublin, April 8th, 1890. AN OLD ASSISTANT.

MEDICAL ARTICLES IN THE LAY PRESS.

A RESPECTED correspondent condemns the writing of medical articles on prevalent diseases in the lay press, and instances a special article which appeared lately on influenza in a leading contemporary. The use of such articles, bristling with delicate details and technical terms, may be questioned. It is to be admitted, however, that they are strictly impersonal, and that the subject was of such great national and international consequence that the newspapers cannot be expected to abstain altogether from discussing them. Moreover, it is to be said that the article in question, scientific in character, was infinitely preferable to many others that might be compiled on the subject.

L.R.C.P.Ed.—We think that the title of "physician" and surgeon could not be used by the holder of the qualification mentioned.

Mr. A. Wilson (Skipton).—1. Goodhart or Ashby and Wright.—2. Hart and Barbour.

THE USE OF LEECHES IN BACTERIOLOGY.

DR. PASTERNATSKI has found that a very convenient method for collecting and preserving for cultivation the spirillum of relapsing fever is to use leeches. If the leeches are kept in a cold place, the spirilla they contain preserve their vitality for a considerable period, much longer than they do when kept in capillary or other glass tubes. When exposed for some time to a temperature of from 27° C. to 30° C. the spirilla were found to undergo transformation into other forms.

ADVERTISING CARDS AND BILLS.

THE card of "Dr. W. Fellows," 2, Shield-road, is not in good form. It is said to be placed under the doors of all houses, which is obviously contrary to all professional usage. It advertises "popular fees for cash." Of the same character is a little handbill advertising Dr. Blewitt's Medical Club for Men, 100A, Bow Common-lane. Terms one shilling a quarter.

VOMITING IN PREGNANCY.

Dr. Warren Bey of Paris speaks highly of the employment of vaginal suppositories of cocoa butter, containing two grains of cocaine and half a grain of extract of belladonna, in promptly relieving this symptom in a case where it persisted in spite of the use of the ordinary sedatives to the stomach.

Propriety.—It is better to introduce a partner personally than by letter; but the latter method is practised by men of undoubted honour. The etiquette of calling differs in places. It is right to do what is customary.

Dr. E. Davies.—Jan. 18th last.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Andrew Clark, London; Dr. Sansom, London; Dr. Thudichum, London; Dr. O. Sturges, London; Dr. Wilks, London; Mr. D'A. Power, London; Mr. Bratton, Shrewsbury; Dr. G. Reid, Stafford; Messrs. Allen and Co., London; Surgeon-Major Dobie, Secunderabad; Messrs. Giddy and Giddy, Pall Mall; Dr. Sumpter, Cley-next-the-Sea; Mr. Stanmore Bishop, Manchester; Mr. Rogers, London; Mr. Whait; Mr. John Lowe, Brighton; Dr. V. D. Harris, London; Mr. Tremlin; Dr. Sinclair Holden, Sudbury; Mr. D. Thompson, London; Messrs. Macfarlan and Co., London; Dr. H. Wylie, Edinburgh; Dr. Norman, Spokane Falls Wash; Mr. W. J. Bell, Scatwell; Dr. Notter; Messrs. Wilcox and Co.; Dr. Mapother, London; Dr. Macdonnell, Dundalk; Mr. Lawson Tait, Birmingham; Mr. J. H. Morgan, London; Messrs. Coxeter and Son, London; Dr. Ewart, Brighton; Mr. J. West; Messrs. Christy and Co., London; Mr. Shipperson, London; Messrs. Kegan Paul and Co., London; Mr. H. Fox, Newcastle-on-Tyne; Messrs. Jeston and Co., Henley-on-Thames; Mr. Way, London; Mrs. Collier, Tunbridge Wells; Mr. Kilvington, Hartlepool; Mr. Amyot, Diss; Dr. Menzies, Brighton; Mr. A. C. Roper, Exeter; Dr. Ward, Oxford; Mr. Pike, Gloucester; Dr. Chadwick, Birkdale; Mr. Robertson, Cockermouth; Mr. Branthwaite, Worcester; Mr. Simpson, Romsey; Mr. Cropley, Northampton; Mr. Watson, London; Mr. Hensley; Mr. Macadam, Edinburgh; Mr. Peters, London; Dr. Murrell, London; Mr. Sampson, York; Dr. Bandiera, Naples; Mr. Althaus, London; Mr. Channey, Bournemouth; Mr. Wanostrocht, Edinburgh; Messrs. W. H. Smith and Son, London; Mr. Halahan, co. Dublin; Messrs. Robertson and Scott, Edinburgh; Mr. J. G. Harrison, London; Messrs. Ormerod and Gudgeon, Cumberland; Mr. Godfrey, Jersey; Dr. O'Neill, Belfast; Mr. Cameron, Oban; Mr. Reveley, Salford; Dr. J. F. Little, London; Dr. Mackesy, Waterford; Mr. Whitmore, London; Mr. Gell, Birmingham; Mr. Applin, London; Dr. Boyd, Glasgow; Mr. Price, Walthamstow; Mr. Sleman, London; Dr. Fyffe, London; Mr. Chance, Carlisle; Mr. Q. Silcock, London; Mr. Byam, London; Mr. Haslam, Birmingham; Mr. H. W. Freeman, Bath; Mr. Rendel, Stratford-on-Avon; Mr. Whiteley, Farnham; Groom, Talgarth; Hollis, Upper Norwood; Sanitas Co., London; W. R. J., Birmingham; *Daily Free Press* Office, Aberdeen; Hieratica, London; Secretary, West Ham Hospital; Secretary, School of Medicine, Sheffield; Medicus, North Wales; Secretary, School of Massage, London; Secretary, Glamorgan Infirmary; S. H. H., London; Propriety; Manzoni; Secretary, South Devon Hospital; L.R.C.S.I., London; M.O.H.; Secretary, Swansea Hospital; H. A. B.; Alpha, Sheffield; A Correspondent; Pulsometer Engineering Co., London; Secretary, Salford Royal Hospital; Proh Pudor; Looker-on; Medicus.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Tyte, Minchinhampton; Major Scott, Shirley; Messrs. Wright, Dain, and Co., Birmihgham; Mr. Somerset, Chelmsford; Mr. Griffiths, North Wales: Mr. Bigg, London; Mr. Powell, Derby; Messrs. Van Houten and Zoon, Holland; Mr. Shuttlewood, London; Messrs. Blondeau et Cie., London; Mr. Miles, Stantonbury; Miss Burnley, St. John's Wood; Mr. Glanodle, Cornwall; Dr. Housemen, Harrow; Mr. Tully, Hastings; Mr. Forde, Dublin; Mr. Rankin, Douglas; Mr. J. Carter, London; Mr. Ryan, Marylebone; Mr. Fennell, London; Mr. Howard, Itchin; Mr. Hoffmann, Swansea; Dr. Cook, Sheffield; Dr. Madden, Dublin; M. Durand, Paris; Mr. Laurie, Glasgow; Dr. Magee, North Wales; Dr. Scriven, Derby; Dr. Hizpurn, London; Dr. Davies, Ebbw Vale; Mr. Pearce, London; Miss Powles, Ipswich; Messrs. Smith and Co., Finsbury; Mr. Crickmay, Framlingham; Mr. Turtle, South Hackney; Mr. Webb, Manchester; Mr. McCarthy, Salop; Mr. Clarke, Notting-hill; Mr. Coulton, Devizes; Mr. Edge, Stockport; Mr. Shone, Marlow; Mr. Wilson, Edinburgh; Dr. Windle, Halifax; Mr. Girling, Halifax; Miss Turner, Manchester; M. Lorette, Paris; Dr. Menzies, Cheshire; Mr. Edwards, Cardiff; Mr. O'Connell, Tralee; Mrs. Short, Greenwich; Mr. McDonald, Dumfries; Mr. Heywood, Manchester; Dr. Woodhead, Leeds; Dr. Menzies, Northwich; Mr. Robertson, London; Medicus, Yorks; Q., London; Medicus, Holloway; B. Y.; Medicus, Southsea; G. M., Walthamstow; Geddes Manufacturing Co., London; L. Q., Guernsey; Fides, London; Secretary, Royal Albert Hospital, Devonport; H. C., Glamorgan; Secretary, Great Yarmouth Hospital; J. C. O., London; S. R., Camden-town; Matron, County Hospital, Dorchester; Cyclops, London; W. R. J., London; W. M., Birmingham; M. A. R., Sydenham; T. C. B., London; Omega, Manchester; Alpha, Somerset; Dr. H., Leeds; Hants, London; Varsity, London; Fortuna, London; Occasional, London; X. Y. Z., Biggleswade; Medicus, Folkestone; M. C. K., London; N., Govan; Lady Superintentent, London; Yorkshire, London; R., London; Sanitary Science, London; H. Y., London; Surgeon, Edinburgh; Mrs. K., West Kensington; Z. Q., London; Forceps, London; M.D., London; J. G., Littlehampton; M.R.C.S.E., London; S., London; Medicus, Margate; Salop, London; M. A. C., London.

NEWSPAPERS.—*Scotsman, Northern Whig, New York Morning Journal, Public Opinion, Reading Mercury, Derbyshire Advertiser, Weekly Free Press and Aberdeen Herald, Mining Journal, Leeds Mercury, Sunday Times, Kilkenny Journal, City Press, Builder, Sheffield Daily Telegraph, New York Herald (London), Local Government Chronicle, West Middlesex Standard, Hertfordshire Mercury, Broad Arrow, Chemist and Druggist, Metropolitan, Surrey Advertiser, Windsor and Eton Express, Christian News, Rotherham Advertiser, Bristol Mercury, West London Observer, Norfolk Chronicle and Norwich Gazette, Newcastle Journal, Star, Exchange and Mart, Puck, Bath Daily Chronicle, Shields Daily Gazette, Scottish Leader, Hospital Gazette, Manchester Guardian, Glasgow Herald, Financial News, West Middlesex Advertiser, Dundee Weekly News, Midland Counties Herald, Western Mail, Worcestershire Echo, Hull Express, Yorkshire Post, Kensington News, Evening Telegraph and Star (Sheffield), Baby, The Schoolmaster, &c.*, have been received.

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Agent for the Advertisement Department in France—J. ASTIER, 66, Rue Caumartin, Paris.